

<210> 1063  
<211> 3760  
<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 1064

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1064

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			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe	
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Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
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				85				90						95	
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
			100					105					110		
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115					120					125			
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130					135					140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
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Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
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<210> 1065
<211> 892
<212> DNA
<213> Homo sapiens
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1006



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 <212> PRT  
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<400> 1066  
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 35 40 45  
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<210> 1067  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

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<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

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Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
		20					25					30			
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
	35					40					45				
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
	50					55				60					
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65				70					75					80	
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
		85						90						95	
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
	100						105					110			
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
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<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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<210> 1070

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1070

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Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
      35           40           45
Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
      50           55           60
Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
      65           70           75           80
Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
      85           90           95
His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
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Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
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&lt;210&gt; 1071

&lt;211&gt; 998

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1071

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780

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<210> 1072

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1072

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Arg	Ile	Ala	Gly	Gln	Ile	Gln	Ala	Val	Glu	Arg	Ala	Leu	Glu	Ser	Asp
		20					25					30			
Ala	Asp	Cys	Ala	Lys	Thr	Leu	His	Leu	Val	Ala	Ala	Thr	Arg	Gly	Ala
		35				40					45				
Ile	Asn	Gly	Leu	Met	Asp	Glu	Ile	Ile	Glu	Asp	His	Ala	Arg	Lys	His
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<210> 1073

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1073

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<210> 1074

<211> 134

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1074

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 Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg  
 35 40 45  
 Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser  
 50 55 60  
 Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile  
 65 70 75 80  
 Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe  
 85 90 95  
 Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys  
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 Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln  
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 Met Pro Leu Asn Thr Asp  
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&lt;210&gt; 1075

&lt;211&gt; 1633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1075

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&lt;210&gt; 1076

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1076

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			20					25					30		
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35					40					45			
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50					55					60				
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65				70						75				80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
						85									

&lt;210&gt; 1077

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1077

nnacgcgtaa cgcgcctcgc gacgcgcctc cacagcatgt cgaccaagtg gacgtgcaat  
 60  
 gcaaacgagg caacatgttt ggcgcctcgc ggagcaccct caccagcga tgctttgttt  
 120  
 caccagagt ttacatatcc aatttttgga gaggtgagg caatttacgg ctacaacggc  
 180  
 ttgcacatga atcttgctt tgcgagcggc agcctgggtgc cgtcgtcga aatcacttac  
 240  
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga  
 300  
 gtgtccccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc  
 360  
 agggcgggtcc gggcgcatTT acgccgccgg gcaccaagat tgcgacgtac actcgcgcg  
 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
1				5					10					15	
Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
		35					40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55					60				
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70				75					80	
Arg	Ala	Lys	Asn	Thr	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln
			85					90					95		
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
			100					105					110		
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115				120						125			
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
		130				135									

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

acgcgtgaag ggtctgcagc ctgtacaact cagacatgct tcacgtgggtc tcagccagtc  
 60  
 agccttgga aatgtacccc catgctgtgg catctacaat cggcctcctg ttcttactct  
 120  
 gctcaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag  
 180  
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta  
 240

ttacccecaa gtccccccag gccctccctt tegtctgcaa agacacacat ctgtttcact  
 300  
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg  
 360  
 ttcccccttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt  
 420  
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg cgcacttgac  
 480  
 cacagcacct tgttcctttc tgtaatctag acacttctgc acaatagagg gccaccct  
 540  
 caagggcaca ggccatgggt tgctctcagg ctccctccac gcgt  
 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
1				5					10					15	
Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20					25					30		
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
		35					40					45			
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
	50					55					60				
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65					70					75				80	
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
				85					90					95	
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
			100					105					110		
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
			115				120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

naaccagtag tagaagtcta ttcttgttcc tattgtacaa attcgccaat attcaacagc  
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 120  
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctctgtt ggccatagag  
 180  
 cagacatctc ttaagatgat gcaggcagta ggagggtgcac ctgcacgtcc cactggagaa  
 240  
 tatatctgtt atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta  
 300  
 aaaactcatc tcgacactgt gcttccaaaa ttgacctgtc ctcaagtcaa caaggaattc  
 360



cccaaccaag aatccttgct gaagcatgtt accattcact ttatgatcac ttcaacgtat  
420  
tacatctgtg agagttgtga caagcaattc acatcagtggt atgaccttca gaaacacctg  
480  
ctggacatgc acacctttgt cttctttcgc tgcaccctct gccaggaagt ttttgactca  
540  
aaagtctcca ttcagctcca cttggctgtg aagcacagta acgaaaagaa agtctatagg  
600  
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac  
660  
aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcctttggc  
720  
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc  
780  
tgtagcaaag ccttccatgc gatcattttg ttagaaaaac acttgcgaga aaaacactgt  
840  
gtattcgaaa ccaagacacc caactgtgga acaaattggag cttccgagca agtgcagaaa  
900 agctgcagac ttgtctgacc aacagccagg agtcccacaa cagtcacgat 960  
gggagcgaag aagacgttga cacctctgag cctatgtacg gctgcgacat ttgtggggca  
1020  
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct  
1080  
ggagaaagtg ccacgtgaa aaagaaagct gagctcatta aagggaatta caagtgcagc  
1140  
gtgtgctctc gaaccttctt ctccgaaaat ggcctccggg aacatatgca gaccaccta  
1200  
ggccctgtca aacactacat gtgccctatt tgcggagagc ggtttccctc ccttttaact  
1260  
cttactgaac acaaagtcac gcatagtaag agtcttgata ctggaaactg ccggatttgc  
1320  
aagatgcctc tccagagtga agaggagttt ttagagcatt gccaaatgca cctgacttg  
1380  
aggaattccc tgacaggctt tcgctgcgtg gtgtgcatgc agacagtgc cttcaccttg  
1440  
gaactcaaaa tccatgggac gttccacatg caaaagacag ggaatgggtc tgcagttcag  
1500  
accacagggc ggggccagca cgtccaaaaa ctgtataagt gcgcatcttg cttcaaagaa  
1560  
ttccgttcca agcaagatct ggtgaaactt gatatcaatg gcctgccata tggctctgtg  
1620  
gccggctgcg tgaatctcag taagagcgcc agcccaggca ttaacgtccc tcccggcacg  
1680  
aatagaccag gcttggggca gaatgagaat ctgagtgcga ttggggaaag gcaaggtggg  
1740  
gggactgaaa cacgtgctc tagctgcaac gttaagtttg agtctgaaag tgaactccag  
1800  
aaccacatcc aaaccatcca ccgagagctc gtgccagaca gcaacagcac acagttgaaa  
1860  
acgccccaa g tatcaccaat gcccagaatc agtccctccc agtcggatga gaagaagacc  
1920  
tatcaatgca tcaagtgtca gatggttttc tacaatgaat gggatattca ggttcatggt  
1980  
gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt  
2040

gactctcctg ccaaactcca gtgccacctg atagagcaca gcttcgaagg gatgggaggg  
 2100  
 accttcaagt gtccagtctg ctttacagta tttgttcaag caaacaagtt gcagcagcat  
 2160  
 attttctctg cccatggaca agaagacaag atctatgact gtacacaatg tccacagaag  
 2220  
 tttttcttcc aaacagagct gcagaatcat acaatgaccc aacacagcag ttagtgcaag  
 2280  
 tacagtctct caaggagaat tgattttgtg gcacaaaaag ggaacatggt ttactctttg  
 2340  
 cacgaaactt tcattgttaa tgtatattat tcagaaacat tgtattgtac cataaaactt  
 2400  
 gtattatcaa actgttggat gttcatgtgt ttgaactttt gcgcaccgga tagaccctt  
 2460  
 gtatataaag tgttgacat gtattatgtc gtctgatact aaaatggtct tataaagaca  
 2520  
 agtggacttg ggccctattc aggcaagatt aaaaaaaaaa aaaagactat gaccaaagt  
 2580  
 gcttaagata aagtattttt aaggaagaaa gattaaaaac aactgttata catgagacta  
 2640  
 tggttggact tccttttctt tacacttaag cctagaattt ctctttaggt atatcagcgc  
 2700  
 ttaaattcaa gactattttt tattgctgaa gattcttgca aaccatgaag agatgttctc  
 2760  
 acagaacaga accccacagc tggataaggc cgtatatat atatttgtaa gccttgcaat  
 2820  
 gtgacaggta gcactactat atatgcaata gttgttatgt agactgtcaa agaatttttt  
 2880  
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 2940  
 ccaaattctt gaatcagttg aactaacctg tatgttactg ttattaatgt ttactctgca  
 3000  
 gtctgaacct ggagattact ggaattgttt tccaagagga aataaattca gtttaccatt  
 3060  
 aggaaaaaaaa aaaaaaa  
 3077

&lt;210&gt; 1082

&lt;211&gt; 757

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1082

Xaa	Pro	Val	Val	Glu	Val	Tyr	Ser	Cys	Ser	Tyr	Cys	Thr	Asn	Ser	Pro
1				5					10					15	
Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
			20					25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
			35				40					45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
			50				55				60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70				75					80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

1017

```

      515              520              525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
  530              535              540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
545              550              555              560
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
      565              570              575
Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
      580              585              590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
      595              600              605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
  610              615              620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
625              630              635              640
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
      645              650              655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
      660              665              670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
      675              680              685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
  690              695              700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
705              710              715              720
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
      725              730              735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met
      740              745              750
Thr Gln His Ser Ser
      755

```

&lt;210&gt; 1083

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1083

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naccggtgag gcatctctgc aggggtgtccg gctagctaag cagagcggct ggaaggctcc
60
agatccgaat aacctgcccc ctcccgtga gcccggtggaa gaggagaaga agtgaccgat
120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
180
tacgagcgac agggcgata caccggcctt cgtaaggctt tgacgatgcc gctgacgac
240
gttgctctgc tggtaagga cgctaacctg cgtggccgtg gtggcgccgg gttccccacc
300
ggcatgaagt ggtccttcgt gcctaaggac aatcccaacc cgacctacct cgttgtcaac
360
ggcgacgagt ctgagccggg cacgtgcaag gacatgccgc tcatgatggc ctccccgcac
420
accctgctcg agggcgatcat cattgcctcc tacgccatca aggccaagat ggccttcac
480

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tacatccgcg gtgaggtgct gcacgtcgtc cgacgc  
516

<210> 1084  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 1084  
Ala Arg Gly Arg Gly Glu Glu Val Thr Asp Pro Leu Thr Pro Val Leu  
1 5 10 15  
Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu  
20 25 30  
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro  
35 40 45  
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly  
50 55 60  
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp  
65 70 75 80  
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro  
85 90 95  
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu  
100 105 110  
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala  
115 120 125  
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg  
130 135 140

<210> 1085  
<211> 374  
<212> DNA  
<213> Homo sapiens

<400> 1085  
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60  
aaatcgtaga gtgtctctga gctgcctagg gggctgtttg cgatcttgcg gacagtgtct  
120  
atatccacaa gggtcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct  
180  
ttgctgcgtt cgtagtcttg gtgcaggctg aagctgtagt cgcttttgta gatgtcccg  
240  
tagaagaact cgggcagggt gcctttcatg gcttccagga tgacggggtt gctcatcccg  
300  
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360  
ggggcggcga attc  
374

<210> 1086  
<211> 110  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1086

```

Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
 1             5             10             15
Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
      20             25             30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
      35             40             45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
      50             55             60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65             70             75             80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
      85             90             95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
      100             105             110

```

&lt;210&gt; 1087

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1087

```

atgacgatcg tggccccacc accgccgacc gcggggcgccg ccattagctt ccttgctgac
60
ggcatccacc cgcacgacct cggccaggtc ctcgacgacc acggcgtgag catccgggtg
120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
180
tcgtttctact tctacaacac tttcccggaa gtggatgcgt tagcgtcggc ggtgcggggc
240
gcccggaat ttttcggagt gcattaggat tggctctgaac gtgaaccttg aatccatgta
300
ccaggaagtc atcctggacc actacaagaa tcccacgcac gcagggttga aggctccctt
360
tgatgccgaa gtgcaccatg tgaacccttc ctgcggtgac ganaccgtct ccgggtgaag
420
ctt
423

```

&lt;210&gt; 1088

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1088

```

Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
 1             5             10             15
Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
      20             25             30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
      35             40             45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
      50             55             60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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85  
Lys Leu Ala Trp Glu Asn Thr  
100

90

95

<210> 1091  
<211> 438  
<212> DNA  
<213> Homo sapiens

<400> 1091  
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60  
gcgattatta cggttatat gaacgaagtg tatttggtc aagtaggtaa tgaggggctt  
120  
catggctttg ccgaggcgag tcagcacttt tttggacgac ctttaaaaga acttaatatc  
180  
gacgagtttg ccttgtagt aggaatggtg aaagggcctt ctatttataa tcctgaacga  
240  
caccctaaac gtgctttatc acgcagaaat acggtattag caattttaaa aagccaagat  
300  
cgtttaaccg agtcggatta taatatttta cggaaacaac ccattcgctt ggcagataaa  
360  
caccaagaac gctcagtata tggggattat ttagatctag tctctatgca gttatcgcca  
420  
gactttgatc gctgcatg  
438

<210> 1092  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 1092  
Thr Arg Lys Leu Thr Glu Val Val Met Ser Leu Leu Leu Glu Tyr His  
1 5 10 15  
Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu  
20 25 30  
Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln  
35 40 45  
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala  
50 55 60  
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg  
65 70 75 80  
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu  
85 90 95  
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys  
100 105 110  
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly  
115 120 125  
Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg  
130 135 140  
Cys Met  
145



<210> 1093  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1093  
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 60  
 ggtcagctgc tgaacgacga gcagtacttc gaagcgctgg aagagttcgg cgacgatttc  
 120  
 gatgcccga tgggtgccga agctgtccgt gaactgctgc acgctatcga cctggaacac  
 180  
 gagattggcc gtctgcgtga acaaattccg caaaccaact ccgaaaccaa gatcaagaag  
 240  
 ctgtccaagc gtctgaagtt gatggaagcc ttccagggtt ccggcaactt gccagagtgg  
 300  
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 351

<210> 1094  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1094  
 Arg Val Leu Tyr Phe Glu Ser Tyr Val Val Ile Asp Pro Gly Met Thr  
 1 5 10 15  
 Thr Leu Glu Lys Gly Gln Leu Leu Asn Asp Glu Gln Tyr Phe Glu Ala  
 20 25 30  
 Leu Glu Glu Phe Gly Asp Asp Phe Asp Ala Arg Met Gly Ala Glu Ala  
 35 40 45  
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg  
 50 55 60  
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys  
 65 70 75 80  
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn  
 85 90 95  
 Leu Pro Glu Trp Met Val Leu Thr Val Leu Pro Val Leu Pro Pro Asp  
 100 105 110  
 Leu Arg Pro Leu Val  
 115

<210> 1095  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<400> 1095  
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 60  
 gagcacctgg agaaggagct gtccgagaag agcggggcagc tgcggcaggg cagcgcccag  
 120  
 agccagcggc agatccgcgg ggagatcgac agcctgcgcc aggagaagga ctactgctc  
 180

aagcagcgcc tggagatcga cggcaagctg aggcagggga gtctgctgtc ccccgaggag  
 240  
 gagcggacgc tgttccagtt ggatgaggcc atcgaggccc tggatgctgc cattgagtat  
 300  
 aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgctgtcc  
 360  
 cagtgcgaga tgaacctcat ggccaagctc agctacctct catcctcaga gaccagagcc  
 420  
 ctctcttgca agtatatttga caaggtgggc cagcagccca tggccccccc agctcctcct  
 480  
 cacggcacgt gtggggaggt gtctcatggc agctgctcca gcggatatcc cgttctctcc  
 540  
 cagactggggg gacagaatca ggaccaactc atctgcaggg ccgcctgacc ttaaagccta  
 600  
 ttttacttgt gaacctaag  
 619

&lt;210&gt; 1096

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1096

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His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
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&lt;210&gt; 1097

&lt;211&gt; 5108

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 1098

<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

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Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
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Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
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Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
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Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
			85						90					95	
Leu	Glu	Asn	Ile	His	Leu	Ala	Gly	Gln	Met	Met	His	Cys	Ser	Ala	Cys
			100					105					110		
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
			115				120					125			
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
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Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
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Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
			165						170					175	
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Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
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Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
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Ala	Lys	Asn	Lys	Gly	Glu	Val	Phe	Pro	Thr	Thr	Glu	Val	Leu	Leu	Gln
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Leu	Ala	Ser	Glu	Ala	Leu	Pro	Asn	Asp	Met	Thr	Leu	Ala	Leu	Ala	Tyr
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Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu
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&lt;210&gt; 1099

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1099

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&lt;210&gt; 1100

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1100

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Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
      65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

&lt;210&gt; 1101

&lt;211&gt; 540

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1101

```

gtcgacgtta ccaactacgt catgttggag tctggtcagc cgcttcatgc ctatgatgcc
60
gacaacgtca gcgggacgat tgtggtccgt aaggccacg agggtagca tctattgacc
120
ctcgacgaca ccgatcgac cctcgatcct gacgatctag tcatcgccga cgactcggga
180
gccattggcc tggctggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcacttcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggaggc ctcccgcgc tttgagcggg gcgttgatcc gatttgcgcc
360
cataccgcag ccgttcgcgc agcgggaattg ctgcccagt acggcgggtgc caccgtcggg
420
gagcccaccg tcgttggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaaggtgcc actgaagagg tcatcgagat cttgacgcgt
540

```

&lt;210&gt; 1102

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1102

```

Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```

```

      85              90              95
Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
      100              105              110
Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Ala Val Arg Ala Ala
      115              120              125
Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
      130              135              140
Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
      145              150              155              160
Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
      165              170              175
Ile Leu Thr Arg
      180

```

&lt;210&gt; 1103

&lt;211&gt; 537

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1103

```

cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgctcaggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaccca ggtgatcttt ccctcggcat agattgacgt ggcattctcg tcggagtga
180
tcaagcagcg cttaggcagc tgctgggccc gcggcttcgc ctagctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgcccgc cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgcggc ggcaccccga tcgtcccttg tccgcatggg tctccctcc actacctacc
420
caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggccccaac
480
cgggggccaa gccgggccc aaccatggga tcaaccggat gtccgtacat cagcggt
537

```

&lt;210&gt; 1104

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1104

```

Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
  1              5              10              15
Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
      20              25              30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
      35              40              45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
      50              55              60
Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

```

```

65              70              75              80
Gly Ala Ala Glu Gly Val Pro Gly Leu Gly Gly Tyr Leu Arg Glu Gly
              85              90              95
Phe Val Cys Ser Gly Glu Leu Gly Glu Ala Ala Gly Pro Ala Ala Ala
              100              105              110

```

<210> 1105  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1105
agggacctgg ggcagcacgt gcacgtgggt gggaggctcc ttgctaccga cagccagcca
60
tgggggtgggc ccttccgagg ctgcctccag gacctgcgac tcgatggctg ccacctcccc
120
ttctttcttc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagtc
180
tggaacctca ctgcgggctg cgtctccgag gacatgtgca gtcctgaccc ctgtttcaat
240
ggtgggactt gcctcgtcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgccagca gctgtggtgt cccggccagc cctgtctccc acctgccacg
360
tgtgaggagg tccctgatgg ctttgtgtgt gtggcggagg ccacgttccg cgagggtccc
420
ccgcccgcgt tcagcgggca caacgcgt
448

```

<210> 1106  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1106
Arg Asp Leu Gly Gln His Val His Val Gly Gly Arg Leu Leu Ala Thr
1              5              10              15
Asp Ser Gln Pro Trp Gly Gly Pro Phe Arg Gly Cys Leu Gln Asp Leu
20              25              30
Arg Leu Asp Gly Cys His Leu Pro Phe Phe Pro Leu Pro Leu Asp Asn
35              40              45
Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn Leu Thr
50              55              60
Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys Phe Asn
65              70              75              80
Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr Cys Pro
85              90              95
Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys Pro Gly
100              105              110
Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp Gly Phe
115              120              125
Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala Ala Phe
130              135              140
Ser Gly His Asn Ala

```

145

&lt;210&gt; 1107

&lt;211&gt; 618

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggcttctata  
 60  
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgctc cacctcaacg  
 120  
 agaacctega agagcgcgtc gccacgcgca cacaggcgtt ggctgaagcc aaccaacgcc  
 180  
 tggcaaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgctgca cgcgcagaaa  
 240  
 atggaagccg ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc  
 300  
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggcggggcg cagcgacgaa  
 360  
 atcgcccgnc ttactgacgc cgccgtatcg tccgcccatc gcgcggccgc cctcaccat  
 420  
 cggctgctgg cgcttctcgc cgccagtcg ctggccccc gcccgtgga cccaaccag  
 480  
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cacgctcaaa  
 540  
 gtgcaactgg gccgcgatat ctggcccggtg aataccgatg ccagccagtt ggaaaacgcc  
 600  
 ctgctcaacc tggcgatc  
 618

&lt;210&gt; 1108

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1108

Met	Arg	Pro	Asn	Ala	Asn	Ser	Pro	Lys	Arg	Pro	Cys	Ala	Thr	Ser	Thr
1				5					10					15	
Arg	Thr	Ser	Lys	Ser	Ala	Ser	Pro	Ser	Ala	His	Arg	Arg	Trp	Leu	Lys
			20					25					30		
Pro	Thr	Asn	Ala	Trp	Gln	Asn	Lys	Met	Phe	Lys	Arg	Lys	Arg	Ala	Glu
		35					40					45			
Asp	Ala	Leu	Arg	His	Ala	Gln	Lys	Met	Glu	Ala	Gly	Gly	Gln	Leu	Thr
		50				55					60				
Gly	Gly	Ile	Ala	His	Asp	Phe	Asn	Asn	Met	Leu	Thr	Gly	Ile	Ile	Gly
65					70				75					80	
Ser	Leu	Asp	Leu	Met	Gln	Arg	Tyr	Ile	Xaa	Ala	Gly	Arg	Ser	Asp	Glu
			85					90					95		
Ile	Gly	Arg	Leu	Thr	Asp	Ala	Ala	Val	Ser	Ser	Ala	His	Arg	Ala	Ala
			100					105				110			
Ala	Leu	Thr	His	Arg	Leu	Leu	Ala	Phe	Ser	Arg	Arg	Gln	Ser	Leu	Ala
		115					120					125			
Pro	Arg	Pro	Leu	Asp	Pro	Asn	Gln	Leu	Val	Ala	Ser	Leu	Glu	Asp	Leu

130		135		140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly				
145		150		155
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala				160
	165		170	175
Leu Leu Asn Leu Ala Ile				
180				

<210> 1109  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 1109  
 accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc  
 60  
 agcctcaaga tcgtcgcacc gctggggggc atcctcgtgc ccctggatca ggtgcccgat  
 120  
 cccgttttcg ccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa  
 180  
 ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg  
 240  
 atcacgaccc cggaaggcat cgaggttctg gtccatatcg gactggatac cgtgatgctg  
 300  
 cgcggcgaca gctatccccc ccccn  
 325

<210> 1110  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 1110	
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser	
1	5
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu	10
	15
	20
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val	25
	30
	35
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro	40
	45
	50
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr	55
	60
65	70
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp	75
	80
	85
	90
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro	95
	100
	105

<210> 1111  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg  
 60  
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaacgccg tggcgaattc  
 120  
 gcagtacgtg gcggcatcgt cgacgtcttc ccaccggtgc tagaacaccc ggtccgtatc  
 180  
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc  
 240  
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac  
 300  
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg  
 360  
 gacgggatcg gcaacggtca agctt  
 385

&lt;210&gt; 1112

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1112

Xaa	Arg	Val	Ala	Pro	Val	Arg	Leu	Ala	Val	Gly	Glu	Glu	His	Asp	Leu
1				5				10					15		
Thr	Glu	Leu	Ala	Thr	Glu	Leu	Val	Asn	Ala	Ala	Tyr	Ser	Arg	Val	Asp
		20					25					30			
Met	Val	Glu	Arg	Arg	Gly	Glu	Phe	Ala	Val	Arg	Gly	Gly	Ile	Val	Asp
	35					40					45				
Val	Phe	Pro	Pro	Val	Leu	Glu	His	Pro	Val	Arg	Ile	Asp	Phe	Phe	Gly
	50				55					60					
Asp	Glu	Ile	Glu	Glu	Met	Thr	Ser	Phe	Ala	Val	Ala	Asp	Gln	Arg	Ser
65				70					75				80		
Thr	Asp	Glu	Thr	His	Gln	Glu	Leu	Ile	Cys	Ala	Pro	Cys	Arg	Glu	Leu
			85				90						95		
Ile	Leu	Thr	Asp	Glu	Val	Arg	Ser	Arg	Ala	Lys	Ala	Leu	Leu	Thr	Asp
		100				105						110			
His	Pro	Glu	Leu	Ala	Asp	Met	Leu	Glu	Arg	Ile	Gly	Asn	Gly	Gln	Ala
		115				120						125			

&lt;210&gt; 1113

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1113

nnncgaccga tgagcgatcg cgaacccgctc aacctgggat acccctacgt cgagtctttc  
 60  
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac  
 120  
 gagcacacca tcgaggagat gcatcagatc gcctcgcggt accccgactc ccgttcggcg  
 180  
 ttgctgccga tcttcgacct ggttcagtcg gtggacggac gcatctcgcc ggtcgggtatt  
 240  
 gagactgcgg ctgaagtgtc cggcattacc accgcccagg tatccggggg ggcgaccttc  
 300

tacaccatgt ataagaagca ccctgcgggc cagcatcaca tcggtgtctg caccacggcg  
 360  
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtn  
 400

<210> 1114  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1114  
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr  
 1 5 10 15  
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln  
 20 25 30  
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His  
 35 40 45  
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile  
 50 55 60  
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile  
 65 70 75 80  
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly  
 85 90 95  
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His  
 100 105 110  
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu  
 115 120 125  
 Glu Val Leu Ala Arg  
 130

<210> 1115  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 1115  
 tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggt  
 60  
 tccctgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc  
 120  
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcgttgt gaagcgtcag  
 180  
 gctgagattg gcctggatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg  
 240  
 gttgattacg gcgctgggtg gacgtattcc atctctcgtt tcggcgggct gtcctttgag  
 300  
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg  
 360  
 tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt  
 402

<210> 1116  
 <211> 134  
 <212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1           5           10           15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
          20           25           30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
          35           40           45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
          50           55           60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
65           70           75           80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
          85           90           95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
          100          105          110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
          115          120          125
Gln Arg Phe Arg Thr Arg.
          130

```

&lt;210&gt; 1117

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1117

```

ggcgccgggc ttgccctggc tggaagtggc atgcagacct tgggtgcggaa cccgctggct
60
gaccctacc tgctaggtgt atcggctggc gcaagtgtgg gagcaaccgc agtcacgct
120
ttggggatgt tcacttcgtg gggaaactcac cgactcactc ttggtgccct tgtagggggc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgcgggcgt ggtgtgttcc tcggcgttct cgcgttggcg agtttctctg
300
tctttcg
307

```

&lt;210&gt; 1118

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1           5           10           15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
          20           25           30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
          35           40           45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

&lt;210&gt; 1119

&lt;211&gt; 353

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1119

```

cgcgtccttg agatgcttga gcaggtcggt attgaggatc cagccagggt gatggattcc
60
tatccgcata aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactgcggcg atctgtctcat ttgtgacgag ccgacgaccg ccttggaagt cacggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctattt
240
attaccacag atttgggcgt tgtctcgac atctgccggg agcttatcgt gatgacgtcg
300
ggcaaggctg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

&lt;210&gt; 1120

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1120

```

Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1              5              10              15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
      20              25              30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
      35              40              45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
      50              55              60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65              70              75              80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
      85              90              95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
      100              105              110
Leu Ser His Pro Asp
      115

```

&lt;210&gt; 1121

&lt;211&gt; 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg  
60  
cccagggcac ggtgttcata ccgaccttga cgatgatgaa aggcgtcgcc gcgaatctca  
120  
ccgcagcggg cgttcccggg gtgagctatg cacacgcca cgagagcacg cgcgcgatgc  
180  
atgcccgggg cgttccgggc ctggccggca ccgacgccta catcgggtcc ttcacacggg  
240  
catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctctgaac  
300  
gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg  
360  
gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc  
406

&lt;210&gt; 1122

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1			5						10				15		
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
		20					25					30			
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
		35				40					45				
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50				55					60					
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
65				70				75					80		
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
		85						90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
		100					105						110		
Ala	Thr	Ser	Thr	Gly											
		115													

&lt;210&gt; 1123

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1123

gccggcgatg cggtcattaa ggcctaagat gcgcgcacgc ctcccgcgtt tctcgcct  
60  
cgctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc  
120  
aagcgaatgc tcccctgttg atattgccgc agtgcgcgag gccctgccgc attcgctcgc  
180  
taaggcgaag ctgcacccgc actccaccaa cgaggatgaa cactcctttt ccattgctcta  
240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacggtgc  
 300  
 acccgtctgc cccgatgacc ccaatgagggc agcgcgc  
 337

<210> 1124  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1124  
 Met Arg Ser Leu Arg Pro Lys Met Arg Arg Arg Leu Pro Ala Phe Leu  
 1 5 10 15  
 Ala Leu Ala Ser Thr Ala Leu Ala Ala Gly Met Val Gly Cys Ser  
 20 25 30  
 Ser Glu Gly Ala Ser Pro Ser Glu Cys Ser Pro Val Asp Ile Ala Ala  
 35 40 45  
 Val Arg Glu Ala Leu Pro His Ser Leu Ala Lys Ala Lys Leu Asp Pro  
 50 55 60  
 His Ser Thr Asn Glu Asp Glu His Ser Phe Ser Met Leu Tyr Arg Ala  
 65 70 75 80  
 Gln Asp Lys Glu Gln Val Ser Leu Leu Gly Thr Lys Tyr Glu Ala Asp  
 85 90 95  
 Gly Ala Pro Val Cys Pro Asp Asp Pro Asn Glu Ala Ala Arg  
 100 105 110

<210> 1125  
 <211> 555  
 <212> DNA  
 <213> Homo sapiens

<400> 1125  
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 60  
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg  
 120  
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat  
 180  
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc  
 240  
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca  
 300  
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgccggtt ctgcgaaatc gagcatttcg  
 360  
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga  
 420  
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc  
 480  
 aagcaaactc aaaaactcac cgggtccaaa gtggccccgg ctaaaacggc agccgctaaa  
 540  
 cctgctgcca agctt  
 555

<210> 1126

<211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 1126  
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly  
 1 5 10 15  
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val  
 20 25 30  
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val  
 35 40 45  
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys  
 50 55 60  
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile  
 65 70 75 80  
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn  
 85 90 95  
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr  
 100 105 110  
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr  
 115 120 125  
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala  
 130 135 140  
 Lys Leu  
 145

<210> 1127  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

<400> 1127  
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc  
 60  
 cgcggtgccc tccaggcagt cgtgtgcggc gtgggtcgacc tgcaggagcg agcagcgcaa  
 120  
 tcactcgctt cggaagtggg cgtaccgggg ttcaccgacc tgggtgaaggc gatcgagtcg  
 180  
 accgctccgg acgcccgggt catcgccacg cgggactcgg ctcaccgcca accgggtgag  
 240  
 accgccatcg acgcccgcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat  
 300  
 gacgccgaag cgatcgtgct ccgcgctgaa cgggcccggc tccgtctcat ga  
 352

<210> 1128  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1128  
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His  
 1 5 10 15  
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
      100      105      110
Gly Val Arg Leu Met
      115

```

&lt;210&gt; 1129

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1129

```

ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttccagga tgacgacgtc
120
ggggccgatg aggaagaggc agagttgcgg ggccaacaca cgctcacaga gaagtttgtc
180
tgcctggatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcctgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggctctc gggctgcatg gatatt
336

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&lt;210&gt; 1130

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1130

```

Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
      20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Ala Glu
      35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
      50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
      85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
      100      105      110

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<210> 1131  
 <211> 672  
 <212> DNA  
 <213> Homo sapiens

<400> 1131  
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc  
 60  
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccggataa cccgtatgtg  
 120  
 ctgggcccgc acgtggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag  
 180  
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga  
 240  
 cgtcgcggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg  
 300  
 cgatcggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg  
 360  
 gtagtgcacg aagccgccgc agaccgtacc gtgcatccag gcgcgggtgta cctgcatcag  
 420  
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag  
 480  
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag  
 540  
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcaggtgga actgacagag  
 600  
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc  
 660  
 ctcgagatgc cc  
 672

<210> 1132  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1132  
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu  
 1 5 10 15  
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val  
 20 25 30  
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala  
 35 40 45  
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser  
 50 55 60  
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg  
 65 70 75 80  
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp  
 85 90 95  
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp  
 100 105 110  
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp  
 115 120 125  
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		
210	215	220

&lt;210&gt; 1133

&lt;211&gt; 796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1133

acgcgtgaag gggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct  
60  
tgtctccggg gacctggcgt aggtctcttc tgccttaacc cttggctttt gcacttcctc  
120  
tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag  
180  
ccggttctctg tcctaaccctc actggcatct tacactctgg gagatagctt cccctgaga  
240  
ggcgagttag ccaagtaagg ggaggtgggc gatggcttcc cttctgtctt gggttggggg  
300  
agtcaggtac agtatttttt cttttaagc atcattgatc acataataag gtttgtcata  
360  
gtccttaatc acagacctgt gaaatttga gaattcacgg cacctaggat gggagttagc  
420  
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg  
480  
ctgggtgtcg gggccttcgc caggacctc ccggggactc tggacgctct ttgtctgcc  
540  
ttccttttcc ctacctcgc tccccgtga gaaagtggg ctcatgcagc tcagctcagt  
600  
gacagagggt ttattagggg tagctctggg acccatctt tggtagtttc ttctctctc  
660  
ttctctaattg gaataattgt ttctgtctac acttctttat ttctctctc ctacagctgc  
720  
cttctaaaaa tgtgcttttc tgttctgca gaactgaagc ttgcatggcc tttgtgtga  
780  
ctttcccttc acgct  
796

&lt;210&gt; 1134

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1134

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser



```

      1             5             10             15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20             25             30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35             40             45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50             55             60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65             70             75             80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85             90             95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100            105            110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115            120            125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130            135            140
Gln Trp Gly
145

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<210> 1135  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

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<400> 1135
gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcgggtctg
120
gcgaccctgc tgctccccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtatgtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttgttt atagtccttg ctgctaacca cccttgttgc
300
tggtgctgct ggagaggcat tgtacctgct catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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<210> 1136  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

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<400> 1136
Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
1             5             10             15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20             25             30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
      35             40             45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50  
Asn Tyr Arg  
65

55

60

<210> 1137  
<211> 357  
<212> DNA  
<213> Homo sapiens

<400> 1137  
acgcgtcgct ggaacccgaa gatgaagcgc ttcattcttca ccgagcgcaa cggatatctac  
60  
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag  
120  
actgtcgcca agggcgccca gattcttttc gtcggcacga agaagcaggc ccaggagtcc  
180  
atcgcttgagc aggccactcg cgcttgccatg ccctatgtca accagcgctt gcttggggga  
240  
atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc  
300  
atggactttg acaaggtttc cggtccggt ctcaccaaga aggagctgct tatgctc  
357

<210> 1138  
<211> 119  
<212> PRT  
<213> Homo sapiens

<400> 1138  
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg  
1 5 10 15  
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp  
20 25 30  
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile  
35 40 45  
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln  
50 55 60  
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly  
65 70 75 80  
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys  
85 90 95  
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr  
100 105 110  
Lys Lys Glu Leu Leu Met Leu  
115

<210> 1139  
<211> 456  
<212> DNA  
<213> Homo sapiens

<400> 1139  
gtgcacaggt cgtctgaggc catgccgcgg acgatcgatc cgagtatggc ggcaccttca  
60

ccaatcccgt aggacccgtc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct  
 120  
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttggcc  
 180  
 agactgaggc cttggaggag cgcggccgtc ggggggacgt ggcttcggc cgggcgttcc  
 240  
 ttgctctcaa ggacttcgtc gtcgcggctg acaaggaata cgtttgtgtg gtcgcctgca  
 300  
 atgcatgctc gagcgtggtg accatcgagg tgaaggacgg ttccggcata gaggtcatcg  
 360  
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct  
 420  
 gccgcgtctt cgctgacgtc ggccaggacc gctagc  
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1				5					10					15	
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
			20					25					30		
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
			35					40				45			
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
			50					55			60				
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65					70					75				80	
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
				85					90					95	
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
			100					105					110		
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
			115					120							

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc  
 60  
 ggccaccagt acaaggacgt ggtggcggtt ggctgttggt ttctggtgct gttgttccgt  
 120  
 ccgaccggca ttctgggccc tccggagggt gagaaagtat gagcagatat cttaaactcg  
 180  
 cgtttttcag cgcctgttg gtgtgggccc tggcctttcc ggtactcggc ctcaagctga  
 240  
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg  
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg  
354

<210> 1142

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1142

Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly  
1 5 10 15  
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu  
20 25 30  
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro  
35 40 45  
Glu Val Glu Lys Val  
50

<210> 1143

<211> 353

<212> DNA

<213> Homo sapiens

<400> 1143

acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc  
60  
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg  
120  
cgcagccgac gacacagcaa ggcgaggcgc gaccaaccga ggggtggctca acagcgccgc  
180  
attcgaaatc ctggcccacg tggccgtcaa tgcccaacac tacgcgctct ccgagagacc  
240  
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc  
300  
gatcgccaag aaggccgcga accacaccat gcatcccggc aggcagtcga ttt  
353

<210> 1144

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1144

Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val  
1 5 10 15  
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg  
20 25 30  
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln  
35 40 45  
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys  
50 55 60  
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys  
65 70 75 80  
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

Met Arg Gln Cys Arg Gly  
100

85

90

95

<210> 1145  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 1145  
gtcttcggcg ggcctggcct gttctattgc gtcattgaccc cgggtgactg gttctcggcc  
60  
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt  
120  
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc  
180  
gaggtgatcg acggggctgg tccggtcggt ttcttcccgc cacagagtat ctggccgttc  
240  
tggtgcgcgc tcgttgctgc catcatgtgc ctccggcccga tcttcggctg gtggatctct  
300  
ctgctcgggc tgggcattgt tatctgggcc gcctcggggtt gggcttttga gtactaccgc  
360

<210> 1146  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 1146  
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr  
1 5 10 15  
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser  
20 25 30  
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys  
35 40 45  
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp  
50 55 60  
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe  
65 70 75 80  
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly  
85 90 95  
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser  
100 105 110  
Gly Trp Ala Phe Glu Tyr Tyr Arg  
115 120

<210> 1147  
<211> 409  
<212> DNA  
<213> Homo sapiens

<400> 1147  
tgtacattgg ctatgcagtc tggcctcctg aagggttatga tagtagccaa aaatatagaa  
60

gccccaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt  
 120  
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc  
 180  
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgaggtt  
 240  
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt  
 300  
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc  
 360  
 cagagtacac tgaaatataa ctggatcatca gtacacatag aatctgatn  
 409

<210> 1148

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1148

Met	Gln	Ser	Gly	Leu	Leu	Lys	Val	Met	Ile	Val	Ala	Lys	Asn	Ile	Glu
1				5					10					15	
Ala	Lys	Lys	Ala	Ser	Thr	Phe	Phe	Ile	Asn	Pro	Glu	Leu	Ile	Met	Leu
			20					25					30		
Met	Pro	Val	Gly	Gly	Ser	Leu	Cys	Ala	Leu	Gln	Ile	Gly	Arg	Gly	Ser
		35					40					45			
Leu	Leu	Ser	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Ser	Pro	Leu	Ser	Ser	Leu
		50				55					60				
Leu	Ser	Ile	Pro	Arg	Ala	Val	Glu	His	Asp	Glu	Val	Leu	Phe	Pro	Ser
65					70					75				80	
Trp	Ile	Ser	Ser	Phe	Cys	Pro	Pro	His	Lys	Gly	Ala	Leu	Met	Asp	Leu
				85					90					95	
Gln	Glu	Trp	Asp	Ala	Phe	Pro									
															100

<210> 1149

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1149

gtcgacttct gcatggaaaa acgcatctg gtgattgagc acgttgcgga gatgtacggc  
 60  
 cgtgaggcgg tatcgcatat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt  
 120  
 gacgtgggcc gtgtactggg tcacccttat ggcttcgtcg atcgcatctc caagctgggtg  
 180  
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa  
 240  
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg  
 300  
 gtgacgcgg  
 309

<210> 1150

<211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1150  
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala  
 1 5 10 15  
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr  
 20 25 30  
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His  
 35 40 45  
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro  
 50 55 60  
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu  
 65 70 75 80  
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg  
 85 90 95  
 Lys Leu Gly Arg Val Thr Arg  
 100

<210> 1151  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 1151  
 gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgccggc ttatgtcggg  
 60  
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc  
 120  
 gggttgggtc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg  
 180  
 gtgaagttcc tttacacggt tcctaactac tcgaaccgtt cgggaatctc gcaatccacc  
 240  
 gagcgtcgcc gggagatcct agcggtggtt gacgagctgg atctgttggt ggttgaggac  
 300  
 aaccctacg ggttactcaa cctcgatggt gatccactgc cgacgttgaa gtcgatggat  
 360

<210> 1152  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1152  
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro  
 1 5 10 15  
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val  
 20 25 30  
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg  
 35 40 45  
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu  
 50 55 60  
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr

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65              70              75              80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
              85              90              95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
              100              105              110
Leu Pro Thr Leu Lys Ser Met Asp
              115              120

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&lt;210&gt; 1153

&lt;211&gt; 416

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1153

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gcgtggattc gtcctggcgg cgtcgctacc gacctgcccg agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac ctccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccc cactcagggc attggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactgggtcc tgctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccctt attgcgatta cgacacgtat gacttcgacg tcgccacctg ggatacctgt
300
gactgttacg ggcgtttccg catccgcctg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

```

&lt;210&gt; 1154

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1154

```

Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1      5      10      15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
20     25     30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
35     40     45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
50     55     60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65     70     75     80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
85     90     95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
100    105    110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
115    120    125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
130    135

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<210> 1155  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 1155  
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 tggccttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaacccaa  
 120  
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga  
 180  
 gctttccgtc ttctaccagg gtccaccttt aacctgttt atctgaaaat tttccccctg  
 240  
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgtcccc  
 300  
 tgttccttca gggactccat agtatTTTTT ttcacgcgt  
 339

<210> 1156  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1156  
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala  
 1 5 10 15  
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe  
 20 25 30  
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe  
 35 40 45  
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala  
 50 55 60  
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser  
 65 70 75 80  
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg  
 85 90

<210> 1157  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1157  
 nnacagcctc tctccgaccc ggcggcggtt gcacacgtcc ccgtctgagg agtattcgtg  
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 ctggcaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc  
 120  
 gttatgcagg tttgcgcccc aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc  
 180  
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg  
 240  
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag  
 300

gtggcgatgg gaatggggcg tgacgttcgc gacgccatct tcacccgcac ccttgacttc  
 360  
 tcggccccggg agatcaacaa attcggagca ccatcactca ttaccgggac taccaacgac  
 420  
 gtccag  
 426

<210> 1158  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1158  
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His  
 1 5 10 15  
 Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu  
 20 25 30  
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr  
 35 40 45  
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val  
 50 55 60  
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala  
 65 70 75 80  
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr  
 85 90 95  
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro  
 100 105 110  
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln  
 115 120

<210> 1159  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1159  
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 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgcgcctct gccacgggaa  
 120  
 gttttcctcg agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag  
 180  
 gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgctgcttg gtgtggctgt  
 240  
 ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca  
 300  
 gtgccacagc cttctcaagt ccttctgca gagggtcaac gcctccccgg ctggtcgccg  
 360  
 gaagccttgt gcaaaggctg gtgccagcc cccaacaggg gcagaggagg gagcgtgtct  
 420  
 ggtggatctg atca  
 434

<210> 1160

<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1160  
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu  
 1 5 10 15  
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser  
 20 25 30  
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val  
 35 40 45  
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys  
 50 55 60  
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln  
 65 70 75 80  
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val  
 85 90 95  
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp  
 100 105 110  
 Leu Ile

<210> 1161  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<400> 1161  
 ctgcacacac accaggccac gccacgagg acggccagtc agcatgcagc caatacacc  
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 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc  
 120  
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggc cccagcgttt  
 180  
 atcattccag aagagcagca ggcagaacct tcacctccca agagctgcaa gtgcgctgtg  
 240  
 gcaggaaaag aagatctggc gtctgaagtc agtcctgtct ctccaggaaa agagggacga  
 300  
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca  
 355

<210> 1162  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1162  
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro  
 1 5 10 15  
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys  
 20 25 30  
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe  
 35 40 45  
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

50                      55                      60  
 Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu  
 65                      70                      75                      80  
 Gln Glu Lys Arg Asp Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro  
                     85                      90                      95  
 Val Met Gly Glu Asn Thr  
                     100

<210> 1163

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1163

ngcgcgccag gaagcgggag gtcagctgta cacccagggt aatagaactt ctaccctcag  
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 aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga  
 120  
 gtgagcatct ggcagctggg ggaggagatc cctgaaggct gcagcacgcc ggactttgag  
 180  
 cagaagcccg tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc  
 240  
 tgtggggagc ccaggcccga ggtgcgttgg cagaactcca aaggtgacct cagtgatcc  
 300  
 agcaagtaca agatctcctc cagccctggc agcaaggagc acgtgctgca gatcaacaag  
 360  
 ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc  
 420  
 gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga  
 466

<210> 1164

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1164

Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp  
 1                      5                      10                      15  
 Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu  
                     20                      25                      30  
 Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe  
                     35                      40                      45  
 Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn  
                     50                      55                      60  
 Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser  
 65                      70                      75                      80  
 Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu  
                     85                      90                      95  
 Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala  
                     100                      105                      110  
 Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys  
                     115                      120                      125

<210> 1165  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<400> 1165  
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 tgcttttagta aagtccttgt tgagccgctg ctgctcaagc tcaacttgac nattatgtgt  
 120  
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccg gtcagttggc tgcagcagga  
 180  
 ttccccgccg ctgaacactg gaaagtgtat ctgggtgacga tgctcatctc cttcgtctcc  
 240  
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg  
 300  
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gtcgccgtcc acacttctgg  
 360  
 gaactgggtca tcggcgtaga gcttttcttc ctgcgcttta atctcatgga agcc  
 414

<210> 1166  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 1166  
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly  
 1 5 10 15  
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu  
 20 25 30  
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr  
 35 40 45  
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala  
 50 55 60  
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser  
 65 70 75 80  
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg  
 85 90 95  
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu  
 100 105 110  
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu  
 115 120 125  
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala  
 130 135

<210> 1167  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1167  
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ctggtgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg  
 120  
 tagccgggtg acctgcctga ccatcttcgg caaaccagtg cgcagttgtg tggatgaactc  
 180  
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat  
 240  
 gctcttgcca gagttcggat ccttgatcgc catcgcccttg acggccaccc ccgaccagc  
 300  
 ccgcacgccc agggcggtacc catcggtcat cgcgtcgcgg acgatgggta ccaggctcgtg  
 360  
 gcattcctgc gcggtgtggc ttcgcacgca tcgacgcagg aagtcagcct cgccccggga  
 420  
 cagggttcc ttactaagtt ccgcggtttt ctttcccgac gcgt  
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20						25					30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
		35					40					45			
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
		50				55					60				
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70					75				80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90						95	
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctggtcgg ggacagcctc  
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 ctagagcctt tctggccaat gggaaacagga atagcccggg gctttctagc tgctatggac  
 120  
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag  
 180  
 agggaaagta tttacaggtt gctgcctcag accaccctg agaatgtgag taagaacttc  
 240  
 agccagtaca gtatcgaccc tgtcactcgg tatcccaata tcaacgtcaa cttcctccgg  
 300  
 ccaagccagg tgcgccatth atatgatact ggcgaaacaa aagatattca cctggaaatg  
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt  
 420  
 tcaagcaaac. tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaactg  
 480  
 acagat  
 486

<210> 1170  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1170  
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser  
 1 5 10 15  
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe  
 20 25 30  
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly  
 35 40 45  
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu  
 50 55 60  
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr  
 65 70 75 80  
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu  
 85 90 95  
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp  
 100 105 110  
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys  
 115 120 125  
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp  
 130 135 140  
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp  
 145 150 155

<210> 1171  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 1171  
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 ggcagcgcca ggtgctggcg ctgcccaggg ccccggtcca agtggggccc atagcagccg  
 120  
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg  
 180  
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt  
 240  
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc  
 300  
 tgccgggaca ctgcaggctg ggcccgcgc gcccttgag ggcagggtcaa aatcccggaa  
 360  
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc  
 420

acctcctac  
429

<210> 1172  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 1172  
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala  
1 5 10 15  
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu  
20 25 30  
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly  
35 40 45  
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys  
50 55 60  
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu  
65 70 75 80  
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Gly Thr Leu Gln  
85 90 95  
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg  
100 105 110  
His Ser Val Gln Ala Asp  
115

<210> 1173  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 1173  
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ggacttgggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg  
120  
tactatgacg cctactacgg ctcggtcag aaagtccgta ccctcatcca acgcgacttc  
180  
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc  
240  
cggctgggtg agcgtactgc tgacccgatg gcgatgtacc gtcggatct atgcacggtc  
300  
ccggccaata tggccggaag tcccgcagga tctttcccga tcggtctatc agagaccgac  
360  
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga  
420  
gttggggccg ctcta  
435

<210> 1174  
<211> 145  
<212> PRT  
<213> Homo sapiens



&lt;400&gt; 1174

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala  
 1 5 10 15  
 Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu  
 20 25 30  
 Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser  
 35 40 45  
 Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp  
 50 55 60  
 Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe  
 65 70 75 80  
 Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp  
 85 90 95  
 Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe  
 100 105 110  
 Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val  
 115 120 125  
 Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala  
 130 135 140  
 Leu  
 145

&lt;210&gt; 1175

&lt;211&gt; 729

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1175

gatcgactg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag  
 60  
 caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat  
 120  
 cgctgggttaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct  
 180  
 gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttaa  
 240  
 ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc  
 300  
 aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg  
 360  
 gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc  
 420  
 ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat  
 480  
 ggcttgcagg tcaagcaggg gaagtcggtt ttgtggtcac atttaattcc ttttcaggac  
 540  
 agagaagaga accaagagcc ccttgcagaa tcaccagttg ccctcggacc agaaagaaaa  
 600  
 aaatctgact caggagttat gttgccaacg ctcagggtct ctcttattca ggacatgagg  
 660  
 catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga  
 720  
 ctgtctcta  
 729

<210> 1176  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<400> 1176  
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln  
 1 5 10 15  
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu  
 20 25 30  
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr  
 35 40 45  
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly  
 50 55 60  
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu  
 65 70 75 80  
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val  
 85 90 95  
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys  
 100 105 110  
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala  
 115 120 125  
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn  
 130 135 140  
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His  
 145 150 155 160  
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile  
 165 170 175  
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro  
 180 185 190  
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu  
 195 200 205  
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn  
 210 215 220  
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg  
 225 230 235 240  
 Leu Ser Leu

<210> 1177  
 <211> 581  
 <212> DNA  
 <213> Homo sapiens

<400> 1177  
 acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc  
 60  
 cgctgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa  
 120  
 gctcatcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga  
 180  
 cgctgatctc ggtactgccc atggcgatcat gaaggatcgc gcgatacggg gcgacgaccc  
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggtagc acgtccgtgg  
 300  
 ccaacagggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg  
 360  
 tggctgccag gagggcgatg gccggttctg gggcatcttt ggagatcttc agccggacat  
 420  
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga  
 480  
 cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg  
 540  
 ggctttcacc ggcagagatc atggtgtgga ccaccattgt g  
 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
1				5					10					15	
Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
		35					40					45			
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
	50					55					60				
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
65					70					75				80	
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
				85				90					95		
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
			100					105					110		
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
		115					120					125			
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
	130					135					140				
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
145					150					155				160	
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
			165					170					175		
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
			180					185					190		

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

gtgcactttc tggtttctaa ctgtggcccc agccctgact ccttgagggtg ctctgtgtgt  
 60  
 gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg  
 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag  
 180  
 ccccgccaat tcattgtctc tttcagtcce ttctgaaggc tgcatttgge aatgtgaccc  
 240  
 tgggggtggg gaaggcatca gaggaatata ggctatggga cgccagaggc agcgtcctgg  
 300  
 ggacaaagcc cacttcttcc catgcccagg gcttcctcat ggacccagca tggaggacgt  
 360  
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc  
 420  
 agagtctcat aggaagatgc atggtccaca caacagtgag tcggcaggga gtccaggctt  
 480  
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtccatt  
 540  
 ggtgcctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt  
 597

<210> 1180  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1180  
 Met Gly Arg Gln Arg Gln Arg Pro Gly Asp Lys Ala His Phe Phe Pro  
 1 5 10 15  
 Cys Pro Gly Leu Pro His Gly Pro Ser Met Val Asp Val Ala Leu Arg  
 20 25 30  
 Arg Pro Trp Val Val Gly Glu Ala Arg Ala Val Trp Pro Cys Leu Cys  
 35 40 45  
 Ser Glu Ser His Arg Lys Met His Gly Pro His Asn Ser Glu Ser Ala  
 50 55 60  
 Gly Ser Pro Gly Phe Pro Ser Gln Pro Val Val Leu Arg Arg Leu Val  
 65 70 75 80  
 Tyr Asn Pro Arg Ser Leu Val Pro Leu Val Pro Pro Glu Ser Pro Thr  
 85 90 95  
 Ser Arg Gly Thr Cys Met Ala Ser Thr  
 100 105

<210> 1181  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

<400> 1181  
 gtcgactacc tcgatgtttc cccgcgtcag atggtctccg tggctactgc catgattccg  
 60  
 ttctctgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct  
 120  
 gtgccgctgc tgcgttcgga ggctccgttc gtcgggtaccg gtagggagca gcgtgctgct  
 180  
 tacgacgcgg gcgatgtcat tgctgcttcg gccacagggtg tggctgagac cgtgtcggca  
 240  
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc  
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tgttgacgag gg  
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
1				5					10					15	
Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
		35				40					45				
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50				55					60					
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
65				70				75					80		
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
			85					90					95		
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
			100					105					110		
Pro	Leu	Leu	Thr	Arg											
			115												

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

gatccttctg ggcgctggtc caagcgctg gtgaggccgt cctctcctgc agaaccccg  
60  
cctcttcgcc cctgcccgt cacctgttct gtctgtctca cctctccag gaagcctgcc  
120  
tggccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctcgt  
180  
ggctcctgga ggccaggcca cgtctcatc cctctgggt gaggtagagg cacagcctgg  
240  
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tcctctcatg agtgggtgcc  
300  
gtccaggtct gtctgggct ggctgcgagg aggaggttg cctcgcgcg ccattgtcgt  
360  
gacagtggag acatcgccag cctctgtctt gcacagctga cggcagcccc tctctctcca  
420  
gccatgtccc ca  
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1184

```

Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1           5           10           15
Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
      20           25           30
Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
      35           40           45
Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
      50           55           60
Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
      65           70           75           80
Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
      85           90           95
Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
      100           105           110
Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu
      115           120           125
Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
      130           135           140

```

&lt;210&gt; 1185

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1185

```

accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
60
gaattacgcg gcaaatatgt attgttgggt gaagggtgtac ggggctctct atctaaacaa
120
gtcatcaata aataccaatt atccgaggggt catgaaccac aaaagttcgg ccttggctta
180
aaagaaattht gggaaataga cccagaaaaa cacaagaag gcagagtcag tcataccatg
240
ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaacaat
300
caagtctttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccctac
360
caagaatttc aacgctttta acaccatccg attatcgcg agctattaac tggcggtaaa
420
cgc
423

```

&lt;210&gt; 1186

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1186

```

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1           5           10           15
Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
      20           25           30
Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```

```

      35          40          45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
      50          55          60
Glu Ile Asp Pro Glu Lys His Lys Gly Gly Arg Val Ser His Thr Met
65      70      75      80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
      85          90          95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100         105         110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115         120         125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130         135         140

```

<210> 1187  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1187
acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagacgaa ttcaggggct
60
aagggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatatggta
120
gtaccactg ctcgaatttc tctcaagca acatcaagtg ttgatttaaa agtgaatctt
180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
300
attagttatt actatgctaa aagtgatgta gcaaatacct atcagggtta tgccacggta
360
gatgggaagt cgactgatga taccggt
387

```

<210> 1188  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1188
Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
1      5      10      15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
20     25     30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
35     40     45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
50     55     60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
65     70     75     80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
85     90     95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

```

100 105 110  
 Thr Tyr Gln Val Tyr Ala Thr Val Asp Gly Lys Ser Thr Asp Asp Thr  
 115 120 125  
 Gly

<210> 1189  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1189  
 tcgatcgccg accgcccggg ccttgccccc ggcgatgatcg gtggcctgtt ggccagcacc  
 60  
 ctgggtgctg gtttcattgg cggcatcggt gcagggtttc tggccgggta cagcgccaag  
 120  
 gccattgccc gctggggcacg gctgcccagc agcctgggatg cgctcaaacc gattctgatc  
 180  
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg  
 240  
 gtggcgccca tgctcgagg cctgacacac tttctcgaca gcatgggtac caccaacgcc  
 300  
 attctcctgg gcntgttgct cggcggctag  
 330

<210> 1190  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1190  
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu  
 1 5 10 15  
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly  
 20 25 30  
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu  
 35 40 45  
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu  
 50 55 60  
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro  
 65 70 75 80  
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly  
 85 90 95  
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly  
 100 105

<210> 1191  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1191  
 cggccgacga tgtgcggtga gcaagagatt tggagagcca tgatgacgtc agcagacaaa  
 60



gcagggacta acggacagac catgcagaca ccgccggtgg tgcgccgca ggactgggag  
 120  
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgata cccgtgcccg cgacgcactc  
 180  
 gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg  
 240  
 ccctcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac  
 300  
 cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c  
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1			5					10						15	
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
			35				40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55					60				
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65					70					75				80	
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85					90					95		
Tyr	Arg	Ala	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala	
			100				105						110		
Cys	Arg														

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catcttgtag ctcttctttc tctacactna ggttgctccc  
 60  
 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact  
 120  
 cccagcctcc tggccccttc tgtacatgat tttccttggt gccactccat gcatttttct  
 180  
 tggtcagga cttagtgggc ctccatggga cttggtacct ctacttggtc ctttctggaa  
 240  
 tctgtaactt tgtgttcccc accattcttt cttttatgaa ccgatgggtgc aacagcatga  
 300  
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca  
 360  
 ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaaggcgga  
 420

tgggttgatg aaggggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct  
 480  
 gttccatgag gaggattatg ttggtgtgtg tagtcccctg gttcagagtt gtccagaaat  
 540  
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgtctcaaga tagcagtgcg  
 600  
 ttcccagccc ctacaggtgt atacagcaca aaggaggagg ccccttagtg tggctgtcac  
 660  
 agagggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctgggccccg  
 720  
 ag  
 722

<210> 1194  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1194  
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys  
 1 5 10 15  
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe  
 20 25 30  
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu  
 35 40 45  
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser  
 50 55 60  
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val  
 65 70 75 80  
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp  
 85 90 95  
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val  
 100 105 110  
 Tyr Thr Ala Gln Arg Glu Gly Pro Pro Ser Val Ala Val Thr Glu Gly  
 115 120 125  
 Ser Gly Arg Pro Val Val  
 130

<210> 1195  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 1195  
 tctagagcat gatattccgc gggcgcggcc ggggtggactt tggttcgaga gtggaactaa  
 60  
 gtgagtaatg ggggcgggcg gccagacgc gctcccagcc tcctggcgag agtgctgccc  
 120  
 ggtttccccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc  
 180  
 tgcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga  
 240  
 tagccgaact ggtaggactc cggcgcgcc tatttatctt gattggctct gcctgaaggc  
 300

aagcgttaat cccgtccaac ctgtatcact gcgaagagct cggtcgggag cgctttttgg  
 360  
 aaatgcagat tcttagcccc caccagatc t  
 391

<210> 1196  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1196  
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys  
 1 5 10 15  
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln  
 20 25 30  
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp  
 35 40 45  
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr  
 50 55 60  
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val  
 65 70 75 80  
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu  
 85 90 95  
 Phe Gly Asn Ala Asp Ser  
 100

<210> 1197  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

<400> 1197  
 acgcgtgatg atcatgaaaa tggtagagag cgtctagcag aagtcgcctc tgtgatgggc  
 60  
 tggcagcaag atgaaatcat cgtaaagcga caaggggatg aaccctttct gcctgttgca  
 120  
 cttattcatg ccacgggttaa agcgtagcc gatgatgctg aatctgaaat ggccacgatt  
 180  
 gcctgtgcga ttgataacgt agcagagctg tttaacccaa atgtagttaa agtcgtttgt  
 240  
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggt  
 300  
 tttatggaaa aaacagacga tcaagcgtaa ccagcggatt ttctgcgtt gcgtcatatt  
 360  
 ggtccgtatg tttaccgcac gacatn  
 386

<210> 1198  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1198  
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

```

      1           5           10           15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
      20           25           30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
      35           40           45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
      50           55           60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
      65           70           75           80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
      85           90           95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
      100          105          110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
      115          120          125

```

&lt;210&gt; 1199

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1199

```

acgcgttcag cgctcatgtac agccccgggc cgggtcaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatgggtcgg gctgggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccagggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcg ctcgccaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

```

&lt;210&gt; 1200

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1200

```

Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
1           5           10           15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
      20           25           30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
      35           40           45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
      50           55           60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
      65           70           75           80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
      85           90           95
Val Ile Gln Leu Leu

```

100

&lt;210&gt; 1201

&lt;211&gt; 360

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1201

gtcgacgcac aactccagct ggctcgctccc aacagcccga acatccccct ttatcgcgat  
 60  
 atgatacctca ccgtgctgcy catggccaag gatgaccgca accgttggaa tgcaaaaatc  
 120  
 acgctgcagg cgatccgcga gctggataac gccttcgcgc tgctggaaca gttcaagggc  
 180  
 cgccgcaagg tcacggtgtt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcy  
 240  
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggt  
 300  
 ggcggcgcca tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt  
 360

&lt;210&gt; 1202

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1202

Val	Asp	Ala	Gln	Leu	Gln	Leu	Val	Ala	Pro	Asn	Ser	Pro	Asn	Ile	Pro
1			5						10					15	
Leu	Tyr	Arg	Asp	Met	Ile	Leu	Thr	Val	Leu	Arg	Met	Ala	Lys	Asp	Asp
			20					25					30		
Arg	Asn	Arg	Trp	Asn	Ala	Lys	Ile	Thr	Leu	Gln	Ala	Ile	Arg	Glu	Leu
			35				40					45			
Asp	Asn	Ala	Phe	Arg	Val	Leu	Glu	Gln	Phe	Lys	Gly	Arg	Arg	Lys	Val
	50					55					60				
Thr	Val	Phe	Gly	Ser	Ala	Arg	Thr	Pro	Val	Glu	Ser	Pro	Leu	Tyr	Ala
65					70				75					80	
Leu	Ala	Arg	Glu	Val	Gly	Thr	Leu	Leu	Ala	Gln	Ser	Asp	Leu	Met	Val
			85					90						95	
Ile	Thr	Gly	Gly	Gly	Gly	Gly	Ile	Met	Ala	Ala	Ala	His	Glu	Gly	Ala
			100				105						110		
Arg	Ser	Gly	Thr	Gln	Pro	Gly	Gly								
			115				120								

&lt;210&gt; 1203

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1203

ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca  
 60  
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttgaggt  
 120

ggtcttctgg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag  
 180  
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcggt  
 240  
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct  
 300  
 gcactgtgtg tgcaatatga agctgacttt cgacccaaca tgagcatcgt ggtgaaggcg  
 360  
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg  
 420  
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc  
 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro	Asp	Met	Ala	Ala	Arg	Leu	His	Ser	Thr	Arg	Val	Leu	Gly	Thr	Phe
1			5					10					15		
Gly	Tyr	His	Ala	Pro	Glu	Tyr	Ala	Met	Thr	Gly	Gln	Leu	Ser	Ser	Lys
		20						25				30			
Ser	Asp	Val	Tyr	Ser	Phe	Gly	Val	Gly	Leu	Leu	Glu	Leu	Leu	Thr	Gly
		35				40					45				
Arg	Lys	Pro	Val	Asp	Leu	Pro	Leu	Pro	Arg	Gly	Gln	Gln	Ser	Leu	Val
	50				55					60					
Thr	Trp	Ala	Thr	Pro	Arg	Leu	Cys	Glu	Asp	Lys	Val	Arg	Gln	Cys	Val
65					70				75					80	
Asp	Ser	Arg	Leu	Gly	Val	Glu	Tyr	Pro	Pro	Lys	Ser	Val	Ala	Lys	Phe
			85					90						95	
Ala	Ala	Val	Ala	Ala	Leu	Cys	Val	Gln	Tyr	Glu	Ala	Asp	Phe	Arg	Pro
		100						105					110		
Asn	Met	Ser	Ile	Val	Val	Lys	Ala	Leu	Gln	Pro	Leu	Leu	Asn	Ala	Arg
		115				120						125			
Ala	Ser	Asn	Asn	Pro	Gly										

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga  
 60  
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg  
 120  
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt  
 180  
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgccaatc  
 240  
 aagatgtgga gggaatctgt ctgcgcagaa cctggatctc gtggtgttac gacgttgtcc  
 300

ccttctcgct cggacgccgc tcatgctccg ccacgtcgct gagcgagtga caaggtatcc  
 360  
 tgggaccatg cgtatgggtt caactgaagc gctggcgaat cgtaaan  
 407

<210> 1206  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1206  
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp  
 1 5 10 15  
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val  
 20 25 30  
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser  
 35 40 45  
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val  
 50 55 60  
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val  
 65 70 75 80  
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr  
 85 90 95  
 Glu Ala Leu Ala Asn Arg Lys  
 100

<210> 1207  
 <211> 292  
 <212> DNA  
 <213> Homo sapiens

<400> 1207  
 gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag  
 60  
 gcttgccctc attcctatgt gctttcccg ccttgcttct ccagccatgt gtgggacaac  
 120  
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat  
 180  
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca  
 240  
 agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac  
 292

<210> 1208  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1208  
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp  
 1 5 10 15  
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser  
 20 25 30  
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

```

          35          40          45
Gly His Ser Thr Cys Pro Ser Lys Ser Tyr Gln His Leu Ser Trp Leu
    50          55          60
Leu Asn Lys Thr Gln Trp His Pro Cys Gly Cys Leu Pro Ser Ser Phe
65          70          75          80
Ile Ser Ala Pro Gly Gly Asp Ser Gln Lys Val Ser Ala Ala Pro
          85          90          95

```

&lt;210&gt; 1209

&lt;211&gt; 431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1209

```

ttggttccta taatggcggg agcttacatt tttgctggta tcattatattt gttaatgcat
60
gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgcaggggtg gttttgctgg tgcaacggta tggatggcga ttcggttttg tgttgcccgt
180
gggtgtatttt caaatgaggg aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca agggttgggtg gcgatggttag gtactttcct tgatacactt
300
attatttgta caggtttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaatctg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

```

&lt;210&gt; 1210

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1210

```

Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile
1          5          10          15
Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val
20          25          30
Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala
35          40          45
Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser
50          55          60
Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln
65          70          75          80
Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe
85          90          95
Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly
100          105          110
Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe
115          120          125
Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser

```



130 135 140

<210> 1211  
 <211> 480  
 <212> DNA  
 <213> Homo sapiens

<400> 1211  
 gaggaggac gagaggctgg tgagatggag tccagcacc tgcaggagag cccagggcc  
 60  
 agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgcctgac  
 120  
 tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcacgttg  
 180  
 ccacctctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc  
 240  
 tttattccct cagagcctcc tgggagcttg ccttgtggct ccttcctgc tccagtctcc  
 300  
 accctcttg aggtgtggac tagggatcca gccaatcaga gcacacagg ggcttcaca  
 360  
 gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg  
 420  
 gctcctctg aaatagttcc ttttgagaag gcacatccag aggtctggagt gtgctcgga  
 480

<210> 1212  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 1212  
 Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu  
 1 5 10 15  
 Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu  
 20 25 30  
 Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu  
 35 40 45  
 Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala  
 50 55 60  
 Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro  
 65 70 75 80  
 Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro  
 85 90 95  
 Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn  
 100 105 110  
 Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu  
 115 120 125  
 Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu  
 130 135 140  
 Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg  
 145 150 155 160

<210> 1213  
 <211> 1141

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1213

```

nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
60
cgtgatgctc aggggcgggt taccgggata gaggggccat caggcggttg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
180
cacgacgcct atggccggct caccagccac gccacatccg gaaccgacac caccttcgcc
240
tgggaccagg aaggccacct ggcgagacg tgtacgcgtg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
360
gaggagcgtt actcctggga tggacgggggt tggctgtctg acatcaccac cgacgccacg
420
accgtatcga ctcacgtcga tgcattgggg cgcgccagtc gtatcaccac taagggccag
480
caggtagcag tggactggga ctcgtgacc ggagcccca cctcgattga tggtcgtcct
540
gtgcttcccc tgcccggagg acgcatcctc ggcgccacac ccatcggcga taccaacct
600
tggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccgccac ggccactatt
660
gagggtgtcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcaccct
720
tggtgggggc gcgcctctac gacccaacta ccaccacctt cttgtctcct gaccggttaa
780
ccccgcccgc cggcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc
840
tcaccctcac cgatcctctc gggaccacc ccgtcaccga cgaccaactg gcactcctca
900
cccaccccat cggcacactc gcacactacg tcgccaaactc cgtcagcaca ctcgtgcatc
960
acatcaccga tccgatcagc cactgggtggg ccaccacaaa agaccggatc ctctcccggg
1020
acttcctgat cggtgccggc ctcgtcatcg gcggtatcgc gtagcggcca cgggcgtagg
1080
aggacccctc ctagccgcgg ccatttcggg gggactcatc tcaggcgggt tttccgctag
1140
c
1141

```

&lt;210&gt; 1214

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1214

```

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
1           5           10           15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

```

```

      20      25      30
Pro Ser Gly Arg Trp Ser Tyr Gly Tyr Asn Glu Ala Gly Ser Leu Ile
      35      40      45
Ser Ala Thr Gly Pro Arg Thr Gln His Asn Trp Thr His Asp Ala Tyr
      50      55      60
Gly Arg Leu Thr Ser His Ala Thr Ser Gly Thr Asp Thr Thr Phe Ala
65      70      75      80
Trp Asp Gln Glu Gly His Leu Ala Gln Thr Cys Thr Arg Ala His Gly
      85      90      95
His Ala Thr Ala Thr Gln Tyr Arg Tyr Asp Ala Ala Gly Arg Arg Val
      100      105      110
Ser Ala Thr Ser Ser Asp Gly Gln Glu Glu Arg Tyr Ser Trp Asp Gly
      115      120      125
Arg Gly Trp Leu Ser Asp Ile Thr Thr Asp Ala Thr Thr Val Ser Thr
      130      135      140
His Val Asp Ala Leu Gly Arg Ala Ser Arg Ile Thr Thr Lys Gly Gln
145      150      155      160
Gln Val Arg Val Asp Trp Asp Leu Val Thr Gly Ala Pro Thr Ser Ile
      165      170      175
Asp Gly Arg Pro Val Leu Pro Leu Pro Gly Gly Arg Ile Leu Gly Ala
      180      185      190
Thr Pro Ile Gly Asp Thr Asn Leu Trp Arg Glu Val Met Pro Thr Asp
      195      200      205
Pro Asp Asn Pro Tyr Gln Pro Ala Thr Ala Thr Ile Glu Gly Val Pro
      210      215      220
Glu Thr Ile Arg Met Ala Gly Asn Thr Leu Val Val Asp Gly His Pro
225      230      235      240
Trp Trp Gly Arg Ala Ser Thr Thr Gln Leu Pro Pro Pro Ser Cys Leu
      245      250      255
Leu Thr Arg

```

&lt;210&gt; 1215

&lt;211&gt; 317

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1215

```

acgcgttcgc tgcagatcga gtcgccggtg agctcgatct acctgtggat gtactacgtg
60
ggcgtgccga catccggcat cgggggggat cccaacctgc ttacctttta ttggaaccgc
120
ccccggggtc aaccgggcca tcaccgggag aacgccgctc ctcggagggg gtgttctcgc
180
agtcgccggc gtgggtgcgt ggaagaagta ccgcggcacg accttcggcg ggctgctccc
240
gtcgtgtcc ctcggcctcg tgctcgcgtt catcgtgctg aacaaggctg gtcgccgca
300
gtacatcgcc tggatcn
317

```

&lt;210&gt; 1216

&lt;211&gt; 102

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1216

```

Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
      20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
      35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
      50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
      85           90           95
Asp Leu Gln Arg Thr Arg
      100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

```

naccgctggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acaggttggg acagccgtca tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccggtg aagatgctca gcgacgagag
240
cttattttat cggctttgct aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcgttatt tggactgtaa ccatgcgttt tgtctgttta atggtttaga gcagagtgtat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atggtcaata ttatcaagat
420
atgggcggtg aggtattagc gcgaggggag atttttcatg aacattgttg gggtagcctc
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```

```

                20                25                30
Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
      35                40                45
Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
      50                55                60
Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
65                70                75                80
Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
      85                90                95
Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
      100                105                110
Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
      115                120                125
Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
130                135                140
Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
145                150                155                160
Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
      165                170                175
Lys Glu Pro Thr Val Asn
      180

```

&lt;210&gt; 1219

&lt;211&gt; 308

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1219

```

acgcgtgaag ggaggaatac agatggagaa atgggtccac caaaaaatga tgagggtacc
60
tccagagaaa attaccaaga ccattctgtt agtattttcc agctccacag gcctttggaa
120
gttcccagac caccctccct cttttcaaac taaaacaggg atggctctta accaccaccc
180
aaaggcaagg ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
240
ggcccaaccc tgcagcctct gcccatattgg gaaagaccgt gagttggaat tatgggtcgg
300
tgggggggc
308

```

&lt;210&gt; 1220

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1220

```

Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Pro Glu Lys
1                5                10                15
Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
      20                25                30
Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
      35                40                45
Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

```

50                      55                      60  
 Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys  
 65                      70                      75                      80  
 Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly  
                     85                      90                      95

<210> 1221  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 1221  
 gcgcgccagg ggcaggtagc ctgtggcagg tgaggctgcg tgtgggggtgt gctcccagag  
 60  
 gcccgctccag gaaagctgca cctcagagaa gcagtttcct tccttacctg ggaagtttct  
 120  
 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tccccctctc  
 180  
 agtggtccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc  
 240  
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa  
 300  
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgccca  
 360  
 gaagggtccc ttgcagtggg gtggttatgt gcctgcaatc ccagagtgtc ctgaaggac  
 420  
 ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt  
 480  
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca  
 540  
 ttcacggcac agcctgccga gaaacgcgt  
 569

<210> 1222  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1222  
 Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile  
 1                      5                      10                      15  
 Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val  
                     20                      25                      30  
 Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser  
                     35                      40                      45  
 Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser  
                     50                      55                      60  
 Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys  
 65                      70                      75                      80  
 Ser His Ser Arg His Ser Leu Pro Arg Asn Ala  
                     85                      90

<210> 1223  
 <211> 450

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1223

aagcttgctc aggctagtgc cgacgtgct gctctcaaac tcgtcgatgc ccaccggttg  
 60  
 ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catgggttact  
 120  
 gtactttcag atgtgttgcc tgggtgttggc caaggccggg gggttctcgg cgaaactgca  
 180  
 atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt  
 240  
 gaaacaaggc ccgtccccac gatagctcta ccgggacccg gtggagtccc cagacggttg  
 300  
 ccctgttccc tcatcccatc gctgcaaccc ttacaggcga tgacgattca caaagcgcag  
 360  
 ggcagccaat tcacggacgt aacggtgggc ctgccaccac ccgactcgcc cctcctctct  
 420  
 cgtgagttgc tctataccgc catcacgcgt  
 450

&lt;210&gt; 1224

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1224

Lys Leu Ala Gln Ala Ser Ala Asp Ala Ala Leu Lys Leu Val Asp  
 1 5 10 15  
 Ala His Arg Leu Leu Cys Ala His Arg Glu Gly Pro Tyr Gly Val Asp  
 20 25 30  
 Glu Trp Ser Gln Arg Met Val Thr Val Leu Ser Asp Val Leu Pro Gly  
 35 40 45  
 Val Gly Gln Gly Arg Trp Val Leu Gly Glu Thr Ala Ile Val Thr His  
 50 55 60  
 Asn Leu Ala Gln Leu Gly Val Asn Asn Gly Asp Cys Gly Val Ile Val  
 65 70 75 80  
 Glu Thr Arg Pro Val Pro Thr Ile Ala Leu Pro Gly Pro Gly Gly Val  
 85 90 95  
 Pro Arg Arg Leu Pro Cys Ser Leu Ile Pro Ser Leu Gln Pro Leu Gln  
 100 105 110  
 Ala Met Thr Ile His Lys Ala Gln Gly Ser Gln Phe Thr Asp Val Thr  
 115 120 125  
 Val Val Leu Pro Pro Pro Asp Ser Pro Leu Leu Ser Arg Glu Leu Leu  
 130 135 140  
 Tyr Thr Ala Ile Thr Arg  
 145 150

&lt;210&gt; 1225

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1225

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 tcagtgggag gacaaggtcc tcaattcctg gcacattggc ccagagaagt catgaaaacc  
 120  
 caaagcccc cgaagtaag aagtagaaaa aaaccgacc ccgaccagat gaagggacct  
 180  
 gggaagtttt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg  
 240  
 ggctttgcac acagcatctt catggctttc cacaatgac ccagaactga tccagagaaa  
 300  
 cccagggatc aggggttgac ccgaccctgt catcatccca ttctacaaat gaggacactg  
 360  
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 ctggagtgtg ctcatg  
 436

<210> 1226

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1226

Met	Val	Asn	Thr	Gly	Met	Ala	Thr	Trp	Glu	Leu	Lys	Val	Leu	Ser	Val
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Gly	Gly	Gln	Gly	Pro	Gln	Phe	Leu	Ala	His	Trp	Pro	Arg	Glu	Val	Met
		20						25					30		
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
		35					40						45		
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
		50				55					60				
Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
65					70					75				80	
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
				85					90					95	
Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
		100						105					110		
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
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Gly	Ser	Lys	Thr	Gln	Arg	Leu	Glu	Cys	Ala	His					
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<210> 1227

<211> 756

<212> DNA

<213> Homo sapiens

<400> 1227

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 120  
 gacaaagcac gtacacgtaa gatgggcggg acaggactag gtctagctat ttccaaagag  
 180



attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct  
 240  
 atcttcatta ccctaccatg tgaaattatt gaagatgggtg attgggatga atagtaaaga  
 300  
 atacatcaaa acgattatcc tgatactact tgtattaatg agtatcgtct taacctacat  
 360  
 ggtatggaac ttctcacctg atctatcaaa tgctgatagt acgtcatcag ataataagaa  
 420  
 agataattct aaacctattg gaaaaccaat gagtgcgaaa acggataaaa ccatcacacc  
 480  
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 660  
 atatgattta ccgttatcaa ttactttaag ccaagtatta aacatagatg ctaagacacc  
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&lt;210&gt; 1228

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
1				5					10					15	
Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20					25					30		
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
			35				40					45			
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
			50			55					60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70						75				80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
			85					90						95	

Glu

&lt;210&gt; 1229

&lt;211&gt; 377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1229

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 cttgtcgccc ccatggcaaa ccaggggggc gagggcactg gagcgatggg aaccgacacc  
 120  
 ccgctggccg tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc  
 180

gctcaggtaa ccaatccgcc cttggacgct atccgcgagg agcttgtcac ctccctgacg  
 240  
 ggcaccatcg gcccgaggc gaacttgctt gagcctggcc cggaatcatg tcggcaagtg  
 300  
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 360  
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 377

<210> 1230

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1230

Thr	Arg	Arg	Gln	Gln	Leu	Phe	Gly	Tyr	Thr	Ser	Glu	Glu	Pro	Lys	Met
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Leu	Val	Ala	Pro	Met	Ala	Asn	Gln	Gly	Val	Glu	Ala	Thr	Gly	Ala	Met
			20					25					30		
Gly	Thr	Asp	Thr	Pro	Leu	Ala	Val	Leu	Ser	Asn	Cys	Pro	Arg	Met	Leu
		35					40					45			
Trp	Asp	Tyr	Phe	Ser	Gln	Leu	Phe	Ala	Gln	Val	Thr	Asn	Pro	Pro	Leu
	50					55				60					
Asp	Ala	Ile	Arg	Glu	Glu	Leu	Val	Thr	Ser	Leu	Thr	Gly	Thr	Ile	Gly
65				70					75					80	
Pro	Glu	Ala	Asn	Leu	Leu	Glu	Pro	Gly	Pro	Glu	Ser	Cys	Arg	Gln	Val
			85					90					95		
Val	Val	Asn	Tyr	Pro	Ile	Ile	Asp	Ser	Asp	Gln	Leu	Ala	Lys	Ile	Ile
			100				105						110		
His	Ile	Asp	Ala	Asp	Gly	Glu	His	Pro							
		115					120								

<210> 1231

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1231

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 120  
 cacactgttc tggctttggtt agaacatggc gaagatgttg tagtgtaga taatttatca  
 180  
 aactcttccg atgagtctct gcgtcgcgtt gagaaactcg cgggtagaag tgctcagttc  
 240  
 taccaaggcg atatcttgga tgctgagtgt ctgcatcgca tcttcgaggc tcacgacatc  
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 351

<210> 1232

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1232

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      20             25             30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
      35             40             45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
      50             55             60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
      65             70             75             80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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120
cctgcctatc tcttttgcac tccaaagtcc agttttatta aatcccaggg tctaagattt
180
tttctttgag aatttatctc cagtgtttct atggaaatta aaaaagaaaa ttaggataat
240
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360
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420
ggaattaagt gggcttgtag atattgtacg tatgaaaact ggccatctgc aatcaagtgt
480
accatgtgtc gtgcccacag acctagtggg acaattatta cagaagatcc atttaaaagt
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780
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960

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&lt;210&gt; 1234

&lt;211&gt; 708

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1234

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Asn	Trp	Pro	Ser	Ala	Ile	Lys	Cys	Thr	Met	Cys	Arg	Ala	Gln	Arg	Pro
		20						25					30		
Ser	Gly	Thr	Ile	Ile	Thr	Glu	Asp	Pro	Phe	Lys	Ser	Gly	Ser	Ser	Asp
		35					40					45			
Val	Gly	Arg	Asp	Trp	Asp	Pro	Ser	Ser	Thr	Glu	Gly	Gly	Ser	Ser	Pro
	50				55						60				
Leu	Ile	Cys	Pro	Asp	Ser	Ser	Ala	Arg	Pro	Arg	Val	Lys	Ser	Ser	Tyr
65					70					75				80	
Ser	Met	Glu	Asn	Ala	Asn	Lys	Trp	Ser	Cys	His	Met	Cys	Thr	Tyr	Leu
			85						90				95		
Asn	Trp	Pro	Arg	Ala	Ile	Arg	Cys	Thr	Gln	Cys	Leu	Ser	Gln	Arg	Arg
		100						105					110		
Thr	Arg	Ser	Pro	Thr	Glu	Ser	Pro	Gln	Ser	Ser	Gly	Ser	Gly	Ser	Arg
		115					120					125			
Pro	Val	Ala	Phe	Ser	Val	Asp	Pro	Cys	Glu	Glu	Tyr	Asn	Asp	Arg	Asn
	130					135					140				
Lys	Leu	Asn	Thr	Arg	Thr	Gln	His	Trp	Thr	Cys	Ser	Val	Cys	Thr	Tyr

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 Glu Asn Trp Ala Lys Ala Lys Arg Cys Val Val Cys Asp His Pro Arg  
                                  165                      170                      175  
 Pro Asn Asn Ile Glu Ala Ile Glu Leu Ala Glu Thr Glu Glu Ala Ser  
                                  180                      185                      190  
 Ser Ile Ile Asn Glu Gln Asp Arg Ala Arg Trp Arg Gly Ser Cys Ser  
                                  195                      200                      205  
 Ser Gly Asn Ser Gln Arg Arg Ser Pro Pro Ala Thr Lys Arg Asp Ser  
                                  210                      215                      220  
 Glu Val Lys Met Asp Phe Gln Arg Ile Glu Leu Ala Gly Ala Val Gly  
 225                                   230                                   235                                   240  
 Ser Lys Glu Glu Leu Glu Val Asp Phe Lys Lys Leu Lys Gln Ile Lys  
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 Asn Arg Met Lys Lys Thr Asp Trp Leu Phe Leu Asn Ala Cys Val Gly  
                                  260                                   265                                   270  
 Val Val Glu Gly Asp Leu Ala Ala Ile Glu Ala Tyr Lys Ser Ser Gly  
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 Gly Asp Ile Ala Arg Gln Leu Thr Ala Asp Glu Val Arg Leu Leu Asn  
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 Arg Pro Ser Ala Phe Asp Val Gly Tyr Thr Leu Val His Leu Ala Ile  
 305                                   310                                   315                                   320  
 Arg Phe Gln Arg Gln Asp Met Leu Ala Ile Leu Leu Thr Glu Val Ser  
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 Gln Gln Ala Ala Lys Cys Ile Pro Ala Met Val Cys Pro Glu Leu Thr  
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 Glu Gln Ile Arg Arg Glu Ile Ala Ala Ser Leu His Gln Arg Lys Gly  
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 Asp Phe Ala Cys Tyr Phe Leu Thr Asp Leu Val Thr Phe Thr Leu Pro  
                                  370                                   375                                   380  
 Ala Asp Ile Glu Asp Leu Pro Pro Thr Val Gln Glu Lys Leu Phe Asp  
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 Glu Val Leu Asp Arg Asp Val Gln Lys Glu Leu Glu Glu Glu Ser Pro  
                                  405                                   410                                   415  
 Ile Ile Asn Trp Ser Leu Glu Leu Ala Thr Arg Leu Asp Ser Arg Leu  
                                  420                                   425                                   430  
 Tyr Ala Leu Trp Asn Arg Thr Ala Gly Asp Cys Leu Leu Asp Ser Val  
                                  435                                   440                                   445  
 Leu Gln Ala Thr Trp Gly Ile Tyr Asp Lys Asp Ser Val Leu Arg Lys  
                                  450                                   455                                   460  
 Ala Leu His Asp Ser Leu His Asp Cys Ser His Trp Phe Tyr Thr Arg  
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 Trp Lys Asp Trp Glu Ser Trp Tyr Ser Gln Ser Phe Gly Leu His Phe  
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                                  500                                   505                                   510  
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                                  515                                   520                                   525  
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 Val Tyr Leu Pro Leu Leu Trp Glu Gln Ser Phe Cys Trp Lys Ser Pro  
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<212> DNA
<213> Homo sapiens
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<210> 1236
<211> 127
<212> PRT
<213> Homo sapiens
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1094



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				Tyr	Leu	Asp
					Gly	Ile
		85		90		95
Gly	Met	Gln	Ala	Ile	Ala	Glu
			His	Glu	His	Glu
				Leu	Ala	Ala
					Arg	Met
		100		105		110
Leu	Glu	Asp	Tyr	Gln	Thr	Val
			Lys	Gly	Val	Gln
				Pro	Glu	Arg
		115		120		125

<210> 1237  
 <211> 1608  
 <212> DNA  
 <213> Homo sapiens

<400> 1237  
 ccattggccga agggccatac tctacaggcc tcctttctac agcaaaacag agcttcagct  
 60  
 acaccagcac attctgactc aacatggcta tacggttgct atcgctgaag aaagggtcaa  
 120  
 tgctggccta gggccggggc tactagaaca aggtgatctg ggctcttggg atctgctcat  
 180  
 ttgcctgtct tctaagaaag cagaaggaac accctgtata tccaaggaag tcatgtgcca  
 240  
 gttagggtta catcaaaagg caaacagatt accagaaata cagcagccac tttgcagaaa  
 300  
 ggaaggatta tgtcaaatag ttagaagatt cccagaactg caacttcag tgagtcctc  
 360  
 tgtgtgtctg gatcaggga tgcaattaa gccgagtact tcgagtcacc ttttaaaaac  
 420  
 agtgaagcca cgtgtgtgga aaccagggga ctggagtcgt gaacagctga atgaaacgac  
 480  
 agtccttgct ccacatgaaa caatctttcg agccaaagat ctatctgtga ttcttaaagc  
 540  
 gtatgtgttg gtgacgtcct taaccctttt gcgtgcattc attcattcga ctggcacagt  
 600  
 ttggaatcca ccaaagaaaa aacgcttcac tgtcaagctg caaacatttt ttgagacatt  
 660  
 cctgagagcc agttcacctc aacaggcttt tgacattatg aaggaagcaa ttggcaaact  
 720  
 actgctagcc gctgaagtat tcagtgaac atctactctg ggaccaaaga ccttccatag  
 780  
 atgcagattc tgctttcaac ttctaacttt tgatattggg tatggcagtt tcatgtaccc  
 840  
 tgtagtgctc caggtacacg agcatttaaa ttttcaagat tatgataata tggattttga  
 900  
 ggaccaaagt acagaagaat tccttttaaa tgacactttc aattttctct tcctaatga  
 960  
 atcatcactt tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa  
 1020  
 gggtgaaaac tatcaaaagg aactaaatca gtgtctgtcc ttagaagaaa ttaactcaat  
 1080  
 tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tcccatctac  
 1140  
 tactcctggg attcagtcac tgatgcata attttatgat gtggcaaatc ctgtgggaaa  
 1200

tcctggetca gtcctgaccc aatactgggc tctttttaa at gtatttgaac aatttcagtt  
 1260  
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa  
 1320  
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaat aaaaaagctg cagttccaca  
 1380  
 aattaaaaat gaaaataaag aaatacattg cagtgatgat gaaaacacac catgtcatat  
 1440  
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa  
 1500  
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc  
 1560  
 taagtgtctg tgcaaggtgc acctgtacga gcaggcaggg ccaagctt  
 1608

&lt;210&gt; 1238

&lt;211&gt; 458

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1238

Met Cys Gln Leu Gly Leu His Gln Lys Ala Asn Arg Leu Pro Glu Ile  
 1 5 10 15  
 Gln Gln Pro Leu Cys Arg Lys Glu Gly Leu Cys Gln Ile Val Arg Arg  
 20 25 30  
 Phe Pro Glu Leu Gln Leu Pro Val Ser Pro Ser Val Cys Leu Asp Gln  
 35 40 45  
 Gly Met Gln Leu Lys Pro Ser Thr Ser Ser His Leu Leu Lys Thr Val  
 50 55 60  
 Lys Pro Arg Val Trp Lys Pro Gly Asp Trp Ser Arg Glu Gln Leu Asn  
 65 70 75 80  
 Glu Thr Thr Val Leu Ala Pro His Glu Thr Ile Phe Arg Ala Lys Asp  
 85 90 95  
 Leu Ser Val Ile Leu Lys Ala Tyr Val Leu Val Thr Ser Leu Thr Pro  
 100 105 110  
 Leu Arg Ala Phe Ile His Ser Thr Gly Thr Val Trp Asn Pro Pro Lys  
 115 120 125  
 Lys Lys Arg Phe Thr Val Lys Leu Gln Thr Phe Phe Glu Thr Phe Leu  
 130 135 140  
 Arg Ala Ser Ser Pro Gln Gln Ala Phe Asp Ile Met Lys Glu Ala Ile  
 145 150 155 160  
 Gly Lys Leu Leu Leu Ala Ala Glu Val Phe Ser Glu Thr Ser Thr Leu  
 165 170 175  
 Gly Pro Lys Thr Phe His Arg Cys Arg Phe Cys Phe Gln Leu Leu Thr  
 180 185 190  
 Phe Asp Ile Gly Tyr Gly Ser Phe Met Tyr Pro Val Val Leu Gln Val  
 195 200 205  
 His Glu His Leu Asn Phe Gln Asp Tyr Asp Asn Met Asp Phe Glu Asp  
 210 215 220  
 Gln Asn Thr Glu Glu Phe Leu Leu Asn Asp Thr Phe Asn Phe Leu Phe  
 225 230 235 240  
 Pro Asn Glu Ser Ser Leu Ser Ile Phe Ser Glu Ile Phe Gln Arg Leu  
 245 250 255  
 Tyr Arg Ser Asp Val Phe Lys Gly Glu Asn Tyr Gln Lys Glu Leu Asn

	260		265		270
Gln Cys Leu Ser Leu Glu Glu Ile Asn Ser Ile Met Thr Phe Ile Lys					
275		280		285	
Glu Leu Gly Ser Leu Gly Gln Phe Gln Leu Leu Phe Pro Ser Thr Thr					
290		295		300	
Pro Gly Ile Gln Ser Leu Met His Glu Phe Tyr Asp Val Ala Asn Pro					
305		310		315	
Val Gly Asn Pro Gly Ser Val Leu Thr Gln Tyr Trp Ser Leu Leu Asn					
	325		330		335
Val Phe Glu Gln Phe Gln Phe Met Asn Lys Lys Thr Gln Pro His Pro					
	340		345		350
Leu Glu Trp Asn Ser Phe Thr Glu Asp Lys Asn Ile Glu Lys Pro Gln					
	355		360		365
Val Pro Phe Asp Ala Ile Glu Asn Lys Lys Ala Ala Val Pro Gln Ile					
	370		375		380
Lys Asn Glu Asn Lys Glu Ile His Cys Ser Asp Asp Glu Asn Thr Pro					
385		390		395	
Cys His Ile Lys Gln Ile Phe Thr His Pro His Leu Glu Leu Asn Pro					
	405		410		415
Asp Phe His Pro Lys Ile Lys Asp Tyr Tyr Cys Glu Val Pro Phe Asp					
	420		425		430
Val Val Thr Val Thr Ile Gly Val Glu Thr Pro Lys Cys Leu Cys Lys					
	435		440		445
Val His Leu Tyr Glu Gln Ala Gly Pro Ser					
450		455			

&lt;210&gt; 1239

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1239

atacctactg aacgtgaacg aacagaaagg ctaattaaaa ccaaattaag ggagatcatg  
 60  
 atgcagaagg atttgagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa  
 120  
 atggtgtgca acttgcgga attcaaggaa tttatagaca atgaaatgat agtgatcctt  
 180  
 ggtcaaagg atagccctac acagatatct gagcatgtgt tcttgggctc agaatggaat  
 240  
 gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgtcactcga  
 300  
 gagatagata actttttccc aggagtcttt gaggatcata acattcgggt atatgatgaa  
 360  
 gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag  
 420  
 aaacatggat ctaaagcct tgtgcac  
 447

&lt;210&gt; 1240

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1240

```

Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1           5           10           15
Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
      20           25           30
Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
      35           40           45
Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
      50           55           60
Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
      65           70           75           80
Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
      85           90           95
Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
      100          105          110
His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr
      115          120          125
Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
      130          135          140
Lys Cys Leu Val His
145

```

&lt;210&gt; 1241

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1241

```

acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
60
aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
120
taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
180
gagagaaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa cttccccccc
240
acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggctctc
300
aggggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
360
ggatttgtgt tgtgaggtcg gtggtgcgtt cttttctttc ttttctcgcc tgttttcccg
420
gagtgcctgg gttgcgagaa aggcgcatcg caggctgtgc agccgaatcg cttcgcaatt
480
attcatgct
489

```

&lt;210&gt; 1242

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1242

```

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

```

      1           5           10           15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20           25           30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35           40           45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50           55           60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65           70           75           80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85           90           95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100           105           110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115           120           125

```

&lt;210&gt; 1243

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1243

```

ntagactccg tcgatcccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacggt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgtgtgtgt ccctaccacc cgcagtcgcc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

&lt;210&gt; 1244

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1244

```

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
      1           5           10           15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20           25           30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35           40           45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50           55           60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65           70           75           80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

```

      85              90              95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100              105              110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115              120              125
Glu Ala
      130

```

<210> 1245  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1245
gccaaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
60
ccacaatcta tgcccgtgac ttttctgagc tccaggagtt ttttagcact gccagacttc
120
tctggagagg aggagggtttc tgccactttt caatttcgaa cttggaataa ggcagggctt
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcaggtgtc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

```

<210> 1246  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1246
Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
1      5      10      15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
20     25     30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
35     40     45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
50     55     60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
65     70     75     80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
85     90     95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
100    105    110
Ser

```

<210> 1247  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1247

ttgacctcca acccgggcac gcgcatacctg cccagatcc cgatggatgg gcatgacctc  
 60  
 aacccgggtgt ggcggggacgt cggcctgac gtgcacccgc cgatgctcta catggggtac  
 120  
 gtcggtttct ccgtaggcctt tgcgtttgcc atcgccgcct tgctcggcgg gcgcctcgat  
 180  
 gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcgtt cctcggtatc  
 240  
 ggtatcacc cgggttcgtg gtgggcctac tacgaactcg gctggnngcg ctggtgggtc  
 300  
 tgggaccccg gggaaaacc cttcttcgat ccctggctgg ggggcacccc gctgattcac  
 360  
 tcgctg  
 366

&lt;210&gt; 1248

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1248

Leu Thr Ser Asn Pro Gly Thr Arg Ile Leu Pro Gln Ile Pro Met Asp  
 1 5 10 15  
 Gly His Asp Leu Asn Pro Val Trp Arg Asp Val Gly Leu Ile Val His  
 20 25 30  
 Pro Pro Met Leu Tyr Met Gly Tyr Val Gly Phe Ser Val Ala Phe Ala  
 35 40 45  
 Phe Ala Ile Ala Ala Leu Leu Gly Gly Arg Leu Asp Ala Ala Trp Ala  
 50 55 60  
 Arg Trp Ser Arg Pro Trp Thr Ile Val Ala Trp Ala Phe Leu Gly Ile  
 65 70 75 80  
 Gly Ile Thr Leu Gly Ser Trp Trp Ala Tyr Tyr Glu Leu Gly Trp Xaa  
 85 90 95  
 Gly Trp Trp Phe Trp Asp Pro Gly Glu Asn Pro Phe Phe Met Pro Trp  
 100 105 110  
 Leu Gly Gly Thr Pro Leu Ile His Ser Leu  
 115 120

&lt;210&gt; 1249

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggt gccggcaatg  
 60  
 ggcgcgagct tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc  
 120  
 attccactgg aaagcgccgt ggcggatgcg gtggtgtgcg cacaagcctt ccattgggtt  
 180  
 tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg  
 240

ctggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaatacatc  
 300  
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgca agccttcact  
 360  
 ggcgagtatt ttg  
 374

<210> 1250  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1250  
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro  
 1 5 10 15  
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His  
 20 25 30  
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala  
 35 40 45  
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala  
 50 55 60  
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly  
 65 70 75 80  
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile  
 85 90 95  
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr  
 100 105 110  
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe  
 115 120

<210> 1251  
 <211> 742  
 <212> DNA  
 <213> Homo sapiens

<400> 1251  
 accggtctct tcctcgaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac  
 60  
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagttgg gcgcctcctt  
 120  
 ccctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc  
 180  
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgctcca  
 240  
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact  
 300  
 acttccacat ggctacaac gtcatacgc cctttctctt gctcaagctc atcgagcggg  
 360  
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg  
 420  
 ccagcatcca cctgggtggg gactctgtca accaccgct gctcttcagt ggctaccagc  
 480  
 accacctgtc tgccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg  
 540



actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc  
 600  
 ccttcttctt catcctcttc atgtacttca gcggctgctn ttactgcctc taaagctgag  
 660  
 agcttgattc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtac  
 720  
 ctggtcaccg agggccagat ct  
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1			5				10					15			
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
		20				25					30				
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
	35					40					45				
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser
	50					55				60					
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65					70					75					80

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga  
 60  
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc  
 120  
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc  
 180  
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattggaa  
 240  
 acagtctgtg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg  
 300  
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag  
 360  
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg  
 420  
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtcctcaa  
 480  
 ccacccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa  
 540  
 gccatgtctg agggggatgc tccaaccctt tttccagag gcagccggac tcgtgcgagc  
 600  
 cttcctgtgg tgagggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc  
 660

cagtatggag atgaa  
675

<210> 1254  
<211> 86  
<212> PRT  
<213> Homo sapiens

<400> 1254  
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu  
1 5 10 15  
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu  
20 25 30  
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala  
35 40 45  
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val  
50 55 60  
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr  
65 70 75 80  
Leu Gln Tyr Gly Asp Glu  
85

<210> 1255  
<211> 401  
<212> DNA  
<213> Homo sapiens

<400> 1255  
ncgccgatta ccaaggctat ggatgtgtgg gccttgggcg taacgctata ctgtctgctg  
60  
ttcggctcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag tatcctgcat  
120  
gacgattatg ccgtcccgac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca  
180  
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcatgca  
240  
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat  
300  
cgtgttataa cacacccatg gctcgtggca gagtcattgg aatagtagca attgtatata  
360  
ccctcatcac caagatggcc aaagcggtag aaggcccgcg g  
401

<210> 1256  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 1256  
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu  
1 5 10 15  
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr  
20 25 30  
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

      35          40          45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
  50          55          60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
  65          70          75          80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
      85          90          95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
      100          105          110
Trp

```

<210> 1257  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1257
cgcggtacagc tgattgaagg tgatgtcgcc aacgccgacc tgggtggcgca agccgccatc
  60
ggcgccacgg cgggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
  120
ccggtcagca cgcgccagag caattttgtc ggcaccttgä atgtctgcga agccatgcgc
  180
aaggccggtg tgaagcgtgt ggtatttgc tccagcgttg cgggtgtatgg caacaatggc
  240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
  294

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<210> 1258  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1258
Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
  1          5          10          15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
      20          25          30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
      35          40          45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
      50          55          60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
  65          70          75          80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
      85          90          95
Tyr Ala

```

<210> 1259  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<400> 1259  
 nnacactcta gcctctgact caaggaagct gccagggtc ttgcccttcg gtttggggg  
 60  
 atccccgtctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcgtggc  
 120  
 ctcaccgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggc  
 180  
 agcgtgggtgg acgtggctaa gggagtggtc cagggaaggcc tggacaccac tcggtctgca  
 240  
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag  
 300  
 ggggccgtcc aaggggggtct ggacacctcg aaggtgttcc tcaccggcac caaggacacg  
 360  
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc  
 417

<210> 1260  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1260  
 Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro  
 1 5 10 15  
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg  
 20 25 30  
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala  
 35 40 45  
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val  
 50 55 60  
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu  
 65 70 75 80  
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala  
 85 90 95  
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys  
 100 105 110  
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly  
 115 120 125  
 Pro Val Gln Ala Gly  
 130

<210> 1261  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1261  
 ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag  
 60  
 ctgggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg  
 120tgaccctggc ggctggctgg tggatcgaca acaaggctcag cgcccgcctg 180  
 ggcaaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg  
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag  
 300  
 accacctcgt tcgtcgcgga catcggtgct  
 330

<210> 1262  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1262  
 Xaa Ala Arg Ala Val Arg His Gln Glu Met Asn Met Asp Leu Asn Ala  
 1 5 10 15  
 Glu Val Asp Gln Leu Val Arg Gln Ser Gln Thr Trp Ile Pro Leu Ile  
 20 25 30  
 Met Glu Tyr Gly Ser Arg Leu Leu Leu Ala Leu Leu Thr Leu Ala Val  
 35 40 45  
 Gly Trp Trp Ile Asp Asn Lys Val Ser Ala Arg Leu Gly Lys Leu Val  
 50 55 60  
 Gly Leu Arg Asn Ala Asp Leu Ala Leu Gln Gly Phe Ile Ser Thr Leu  
 65 70 75 80  
 Ser Asn Ile Gly Leu Lys Val Leu Leu Phe Val Ser Val Ala Ser Met  
 85 90 95  
 Ile Gly Ile Glu Thr Thr Ser Phe Val Ala Asp Ile Gly Ala  
 100 105 110

<210> 1263  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1263  
 acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg  
 60  
 gcacatgatga tgagtttgct cgccctgggca acacctagca gcaatggcat cgatagtccc  
 120  
 tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac  
 180  
 gtcaacagac cgtcaccgtg gttgacgac tcgccggtgg aggcgtcctt gacgacgac  
 240  
 tggccacgcy ccagggaata catctcccca tccacccaaa agaacgcccc caagctgggc  
 300  
 atcttggcca gcccgatgat cgagagggtt tcaacaagcy actcgggac c  
 351

<210> 1264  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1264  
 Met Pro Ser Leu Gly Ala Phe Phe Trp Val Asp Gly Glu Met Tyr Ser  
 1 5 10 15  
 Leu Ala Arg Gly Gln Ile Val Val Lys Asp Ala Ser Thr Gly Glu Ile

```

                20                25                30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
                35                40                45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
                50                55                60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
65                70                75                80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
                85                90                95
His Arg Pro Arg
                100

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<210> 1265  
 <211> 318  
 <212> DNA  
 <213> Homo sapiens

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<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttgataaac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gcctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

```

<210> 1266  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1                5                10                15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
                20                25                30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
                35                40                45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
50                55                60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
65                70                75                80
Asp Met Pro Leu Thr Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
                85                90                95
Ser Arg Arg

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<210> 1267  
 <211> 343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1267

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg  
 60  
 ggaactgtcc cacggcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac  
 120  
 aacctgtggtt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt  
 180  
 tattccccctt gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg  
 240  
 gatactcatc aaacaccagg ctgtcattgg ggacagggtg agctctggct gttggtgcag  
 300  
 catggtagga agagcaccaa gtccctggact ctgttgattt ata  
 343

&lt;210&gt; 1268

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1268

Met	Pro	His	Ser	Leu	Cys	Phe	Tyr	Ser	Pro	Cys	Glu	His	Leu	Trp	Glu
1				5					10					15	
Leu	Ser	His	Gly	Pro	Cys	Phe	Cys	Ala	Pro	Ala	Asp	Thr	Arg	Gly	Lys
			20					25					30		
Cys	Pro	Thr	Thr	Cys	Val	Phe	Val	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		35				40					45				
Cys	Pro	Thr	Thr	Cys	Val	Phe	Ile	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		50				55					60				
Cys	Pro	Met	Ala	Arg	Val	Ser	Val	His	Leu	Arg	Ile	Leu	Ile	Lys	His
65					70				75					80	
Gln	Ala	Val	Ile	Gly	Asp	Arg	Val	Ser	Ser	Gly	Cys	Trp	Cys	Ser	Met
			85					90						95	
Val	Gly	Arg	Ala	Pro	Ser	Pro	Gly	Leu	Cys						
			100					105							

&lt;210&gt; 1269

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1269

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg  
 60  
 ggacgccgac ctggagccgg ccgccctaga cgggctgac gtccagggtg ggtccccccg  
 120  
 cggcgccgac tacgacaccg tgtccgaaac ctttggcttt tcgccacaat tctgcagcca  
 180  
 gacctggggc gcacggccgg ttcaccgcaa cggatgacct ggcagcggcc atggcggtgt  
 240  
 ccagcgccct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc  
 300

ggttgggtga ggcggaacaat ccctttcatc atgagcaatt ccgggagaat ggcgggcccgc  
 360  
 acggggaaga gggttggatc ggcattggcct c  
 391

<210> 1270  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1270  
 Met Met Lys Gly Ile Val Arg Leu Thr Gln Pro Pro Glu Val Arg Ile  
 1 5 10 15  
 Leu His Ala His Glu Ala Ser His Pro Pro Arg Glu Ala Ala Gly His  
 20 25 30  
 Arg His Gly Arg Cys Gln Asp His Arg Cys Gly Glu Pro Ala Val Arg  
 35 40 45  
 Pro Arg Ser Gly Cys Arg Ile Val Ala Lys Asp Gln Arg Phe Arg Thr  
 50 55 60  
 Arg Cys Arg Ser Pro Arg Arg Gly Gly Thr Pro Gly Arg Ser Ala  
 65 70 75 80  
 Arg Leu Gly Arg Pro Ala Pro Gly Arg Arg Pro Ala Met Arg Pro Ala  
 85 90 95  
 Gly Arg Arg Gln Pro Ser Ala Ala Pro Ile Ala Pro Asp Arg  
 100 105 110

<210> 1271  
 <211> 661  
 <212> DNA  
 <213> Homo sapiens

<400> 1271  
 acgcgtcggtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga  
 60  
 accagaaagc gtcattcggtt tgggtgaacga gaacgggcca tgttgtggtg ggacggataa  
 120  
 cccccgggtt cgctaccata tggcccacta aagagttcac cagggttgat ttaccagccc  
 180  
 cggtcgaccc tcctaccacc gccagaagcg gcgcattcaat agtctctaag cgcggcaaaa  
 240  
 tatagtcggtt aagctgggtt gcgatgcgtc gtgccagccc ggcctgagta atagcctccg  
 300  
 gcaaatccaa ggggaactgg gcctgacgca ggttgtgccg cagatcggtc aacgacagca  
 360  
 gtattctgctc agtggttcatt gtgattcctc ctggtcactc gtcaggcctg tggcggcgcc  
 420  
 cactgcaact cggtgttgac cggctgggtt cgacgtcgct tgaggaatgc gggcagttctc  
 480  
 ggcttcgaca atttggcacc tcgggagcag gtgatagccg ccgggagcag cacgttcata  
 540  
 cggttgatga gctcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg  
 600  
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg  
 660



t  
661

<210> 1272  
<211> 126  
<212> PRT  
<213> Homo sapiens

<400> 1272  
Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn  
1 5 10 15  
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln  
20 25 30  
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu  
35 40 45  
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly  
50 55 60  
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His  
65 70 75 80  
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val  
85 90 95  
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val  
100 105 110  
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala  
115 120 125

<210> 1273  
<211> 489  
<212> DNA  
<213> Homo sapiens

<400> 1273  
gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc  
60  
gacaaggctg aactggatt ggtccggcat ggctgcgac gtgccgtcgt cgaagccgtt  
120  
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtgag  
180  
gttatctgcg ctcgacacat cagagtcgt cgctctcgag cgctgcttgg aggagctcaa  
240  
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct  
300  
gaacaagtga ggttggtcga cgcagcggcg cagctcgacg tcgttgaccg ggctgccgga  
360  
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca  
420  
tcccagcgtc ttcagcgct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg  
480  
cttacgcgt  
489

<210> 1274  
<211> 163  
<212> PRT

<213> Homo sapiens

<400> 1274

```

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1           5           10           15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
 20           25           30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
 35           40           45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
 50           55           60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
 65           70           75           80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
 85           90           95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
 100           105           110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
 115           120           125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
 130           135           140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
 145           150           155           160
Leu Thr Arg

```

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

```

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggagggc tgaacttctc
 60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
 120
cccgaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
 180
ggcaaggctc atctaattga taaactcaat caggagatac ttcgcctggc aaacgaattc
 240
ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
 300
ggcaatcaga aatcagcgtt cagcaggctg actcccgggtg aacgtctcag gctgcgcat
 360
gctacagcca tcgcttggtt acgc
 384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

```

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```

```

      1           5           10           15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20           25           30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35           40           45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50           55           60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
65           70           75           80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85           90           95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100          105          110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115          120          125

```

&lt;210&gt; 1277

&lt;211&gt; 392

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggctt tcttcagctc tggtctgcct tctctccctg ccatcccacc caaaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaataca
180
aagtctcctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaaacg tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

&lt;210&gt; 1278

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
 1           5           10           15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20           25           30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35           40           45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50           55           60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
65           70           75           80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95  
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu  
 100 105 110  
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln  
 115 120 125  
 His Asp  
 130

<210> 1279  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 1279  
 atggagtcgc agactctccg ccacatgatc gaggacgact gcgccgacaa cggcatccca  
 60  
 ctccccaacg tcaactccag gatcctctct aaggatcatc agtactgcaa cagtcacgtc  
 120  
 cagcgccgccg ccaaaccgc tgactccgct gcctccgagg gcggcgagga cctcaagagc  
 180  
 tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc  
 240  
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg  
 297

<210> 1280  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1280  
 Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp  
 1 5 10 15  
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val  
 20 25 30  
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp  
 35 40 45  
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys  
 50 55 60  
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala  
 65 70 75 80  
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly  
 85 90 95  
 Ala Asp Met

<210> 1281  
 <211> 515  
 <212> DNA  
 <213> Homo sapiens

<400> 1281  
 acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt  
 60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg  
 120  
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac  
 180  
 gccctcccca ctaccaagta ggcactgcgg gcaggagtgc ccacccccac cccaaggaag  
 240  
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc  
 300  
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggg ccactcaagg  
 360  
 ggaagatgat ccagaagctc tgctccctcc ctttgetttt gaagaacaca ggagtgcac  
 420  
 gtggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt  
 480  
 ttgcttctaa tttttaaaaa cattcaatgt gtaca  
 515

<210> 1282

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1282

Met	Gly	Glu	His	Ser	Phe	Leu	Asn	Ser	Phe	Pro	His	Leu	Tyr	Arg	Phe
1				5					10					15	
Glu	Asn	Tyr	Gln	Gln	Leu	Met	Gly	Arg	Val	Ala	Cys	Gln	Val	Met	Ala
			20					25					30		
Ala	Trp	Ser	Pro	Ser	Glu	Glu	Gly	Arg	Leu	Asn	Arg	Gly	Arg	Pro	Pro
		35					40					45			
His	Tyr	Gln	Val	Gly	Thr	Ala	Gly	Arg	Ser	Arg	His	Pro	His	Pro	Lys
	50					55					60				
Glu	Val	Gln	Asn	Arg	Gln	Gln	Glu	Glu	Pro	Asp	Ser	Asn	Arg	Val	Gly
65				70					75					80	
Val	Ile	Arg	Arg	Ile	Ala	Lys	Asp	Val	Thr	Thr	His	Gln	Leu	Trp	Glu
			85					90					95		
Pro	Lys	Gly	Val	Cys	Gly	Pro	Leu	Lys	Gly	Lys	Met	Ile	Gln	Lys	Leu
		100					105					110			
Cys	Ser	Leu	Pro	Leu	Leu	Leu	Lys	Asn	Thr	Gly	Val	Thr	Arg	Gly	Glu
		115				120						125			
Ser	Thr	Gly	Leu	Ile	Ser	Ser									
	130					135									

<210> 1283

<211> 296

<212> DNA

<213> Homo sapiens

<400> 1283

gaattcctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc  
 60  
 tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa  
 120  
 gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actgggtaat  
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggc  
 240  
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn  
 296

<210> 1284  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1284  
 Met Asn Cys Ser Val Trp Arg Thr Ser Trp Val Ala Leu Leu Arg Val  
 1 5 10 15  
 Ser Thr Ala Glu Leu Ile His Ile Cys Phe Val His Thr Lys Lys Asn  
 20 25 30  
 Ser Ser Pro Lys Glu Ser Arg Leu Gly Leu Leu Gly Gly Arg Lys Val  
 35 40 45  
 Pro Thr Gly Asn Ser Leu Val Asn Phe Lys Glu Leu Arg Lys Gly Arg  
 50 55 60  
 Lys Asp Gly Phe Phe Ser Cys Glu Ser Arg Gln Gly Pro Asp Asp Asn  
 65 70 75 80  
 Pro Pro Arg Ser Glu Arg Asn Phe Gln Pro Thr Ser Ala Ala  
 85 90

<210> 1285  
 <211> 526  
 <212> DNA  
 <213> Homo sapiens

<400> 1285  
 gggccccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca  
 60  
 gtgaaaggctc catctagagg aggtaaaaga cagggtctgag ggaaaacgcc ttgtacagtc  
 120  
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca  
 180  
 agaagcaaca aaagggattc tacacctcag accaggaggagg gggaatgtgt acaaagattg  
 240  
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc  
 300  
 aaaccacacac ttcagaggca ggctttaaaa cgcctgactt ctgtcagggc cacaggctgg  
 360  
 gctgcccacaa gctcctacgg ggctggggga tccgagagag gacttccac tagtccaaga  
 420  
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcggggccct  
 480  
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt  
 526

<210> 1286  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
      20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
      35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
      50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
      65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
      85           90           95
Ser Pro Arg Cys Gly Asp
      100

```

&lt;210&gt; 1287

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1287

```

acgcgtgaag gggagaggca gctccaggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttcag tttgattgca gcccagaggt
120
caggtgagaa gaaggtacaa caagcaagga aggccccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtt ggggcactgg gcaactccgga attcttcaaa
300
gctctgatgc aacatgtccc cagggtgtct gac
333

```

&lt;210&gt; 1288

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
      20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
      35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
      50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
      65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
      85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<400> 1289  
 acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tggcgcagcg tgtgcatggg  
 60  
 cacggcgtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt  
 120  
 cctgcacggg ggaggaggca aggtggcccc tgccctgtggg cacagagccc accttccggt  
 180  
 ccagcccgag gcccctttcc cagagcccc tcccaagggg ccataccacc tgcattccca  
 240  
 agatggcgtg gggcgccct ggtgcaggag caggggacag tcagggaggc gtgtggcgga  
 300  
 cagtagcagc cccccagccc ccctcccccc accggt  
 336

<210> 1290  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 1290  
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala  
 1 5 10 15  
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr  
 20 25 30  
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu  
 35 40 45  
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro  
 50 55 60  
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala  
 65 70 75 80  
 Ala Pro Gln Pro Pro Ser Pro His Arg  
 85

<210> 1291  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 1291  
 tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga  
 60  
 atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattcctca  
 120  
 taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag  
 180  
 gtaaaccggg tttcccccaa cggataccca tcaactgccat gctcggtttt ttctatccga  
 240



cgccccagcg ggtcatacac catcctgacc acgctaccat cgtcattacg cacttcaacc  
 300  
 agccggcgttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg  
 360  
 accatccgcc caaacgcgt  
 379

<210> 1292  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1292  
 Met Val Glu Lys Arg Ser Ala Lys Arg Gly Val Gln Arg Phe Ala Tyr  
 1 5 10 15  
 Asp Ala Glu Ser Arg Leu Val Glu Val Arg Asn Asp Asp Gly Ser Val  
 20 25 30  
 Val Arg Met Val Tyr Asp Pro Leu Gly Arg Arg Ile Glu Lys Thr Glu  
 35 40 45  
 His Gly Ser Asp Gly Tyr Pro Leu Gly Glu Thr Arg Phe Thr Trp Asp  
 50 55 60  
 Gly Leu Arg Leu Leu Gln Glu His Lys His Ser Gln Thr Ser Leu Tyr  
 65 70 75 80  
 Val Tyr Glu Asp Glu Gly Tyr Gln Pro Leu Ala Arg Val Asp Gly Ala  
 85 90 95  
 Gly Pro Leu Gln Lys Ile Arg Tyr Tyr His Asn Asp Leu Asn Gly Leu  
 100 105 110  
 Pro Glu Gln Leu Thr Glu Val Asp Gly  
 115 120

<210> 1293  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 1293  
 nngccggccg cccgagagct gttcgaggcg tgccgcaacg gggacgtgga acgagtcaag  
 60  
 aggctggtga cgctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg  
 120  
 ctgcacttcg ccgcagggtt tgggcggaaa gacgtagttg aatatttgct tcagaatggt  
 180  
 gcaaagtcc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt  
 240  
 ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat  
 300  
 aattggaatt atactcctag aggggtggagt gtgctcgcga  
 340

<210> 1294  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val  
 1 5 10 15  
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp  
 20 25 30  
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly  
 35 40 45  
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln  
 50 55 60  
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe  
 65 70 75 80  
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro  
 85 90 95  
 Asn Ala

&lt;210&gt; 1295

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1295

ggatcccggga gacctcgctcg gcgaacgtca cctcgtccag ggccgaggcg cggaacaccg  
 60  
 acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgggagg  
 120  
 cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcgggttcg cccgacgcca  
 180  
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgctgc  
 240  
 cgagctcctc cttcgccccg tcgagccgca ccgtcgcgat ctcgtcgccg gcaccgaagc  
 300  
 ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t  
 351

&lt;210&gt; 1296

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg  
 1 5 10 15  
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser  
 20 25 30  
 Ala Val Arg Arg Arg Arg Gly Arg Arg Cys Arg Ser Gly Cys Ala  
 35 40 45  
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly  
 50 55 60  
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala  
 65 70 75

&lt;210&gt; 1297

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1297

gtgcaccggtg attccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga  
 60  
 gacaccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca  
 120  
 gatacactct acaaattctg gggcccacca caccaagaag acacggagga gccaaacaaa  
 180  
 gaaggaccat acgaaatgca cccccaagc aaccaaccaa tccaagaaa aatacgtctc  
 240  
 agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctggctcaag  
 300  
 caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct  
 356

&lt;210&gt; 1298

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10					15	
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25					30		
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
			35				40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
	50					55				60					
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70					75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
			85						90						

&lt;210&gt; 1299

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1299

ggatccactt ctaagatgtc tcaactcacgt ggtgatggca gcaggcctca gactctggtg  
 60  
 gttgttggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttcctg  
 120  
 tgtcttttgc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg  
 180  
 gagttttctg ggggtggggtc acgggtcttg cccggagtgc gccctggcaa aggcctgtgc  
 240  
 cagtgatcct ggagcggagc gaagtgttgc cgtgactctg cagccgcagt tcttagggct  
 300  
 tccttag  
 307

<210> 1300  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 1300  
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser  
 1 5 10 15  
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala  
 20 25 30  
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val  
 35 40 45  
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu  
 50 55 60  
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val  
 65 70 75 80  
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro  
 85 90

<210> 1301  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 1301  
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa  
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 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg  
 120  
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac  
 180  
 atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccggtat  
 240  
 gtgacttcat ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt tggtcctttg  
 300  
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg ttctggacct  
 360  
 ttccctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt  
 408

<210> 1302  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1302  
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr  
 1 5 10 15  
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu  
 20 25 30  
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile  
 35 40 45  
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr
65					70					75					80
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
			85						90					95	
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
		100						105					110		
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120					125			
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130						135									

&lt;210&gt; 1303

&lt;211&gt; 1037

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1303

```

gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccggc
60
gtttgccttg gggccctctc atccacatc attttttcaa ccttcccca ncctttcnag
120
aatagggcca accccttaaa aancaaatnt tcanataaac ccttttcctt ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgcca ccacaccttc accctgccta gcccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttactactaa taaatttctg
480
tttatctgaa actcaaattt gcctgggctg cctgtacttt tcttaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agcccttcc caggctgggt
600
cctgcccggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaag gctgctcagg agacactgca caccttcctc tttcttgtct
720
gggggtcaa gaatccagac gccacacctc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgccc agcccactgc gaccacaggg ctctgccggg gtccctgccg aaccagggg
840
tccggtccag aagccaggga taaatgccgc ttctctata gggacgggtc gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
960
cctgacagct ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc
1020
tggatcccac gcgtggc
1037

```

<210> 1304  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1304  
 Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser  
 1 5 10 15  
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser  
 20 25 30  
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala  
 35 40 45  
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu  
 50 55 60  
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile  
 65 70 75 80  
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly  
 85 90 95  
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser  
 100 105 110  
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly  
 115 120 125  
 Ser His Ala Trp  
 130

<210> 1305  
 <211> 775  
 <212> DNA  
 <213> Homo sapiens

<400> 1305  
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 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggtcctggta cgagtttttc  
 120  
 ccgcgctctc aggggtgctta tgcgatgcg gacggtcact gggtttcagg tactttcgac  
 180  
 acctcctggg agcgcctgga cgccgccgct gcgatgggat ttgacgttgt ttacctgccc  
 240  
 gcgatccatc ccatgggcca agccttcgc aagggaagg acaacaccct gaccccaggt  
 300  
 ccggacgatc cgggatcgcc gtgggccatc ggatcgtctg atggcggcca tgacaccatt  
 360  
 caccgccacc taggcacctt cgacgacctc gaccgtttcg tggcccacgc tcatgaccta  
 420  
 ggcatggagg tggccctaga ttttgcttg caagcctcac cagaccaccc gtgggtacac  
 480  
 cagcacccgg agtggttcac gaccgcggt gatggcacca tcgcctatgc agaaaattca  
 540  
 cccaaaaagt atcaggacat ctaccgatc aacttcgaca atgaccctga cggtatctac  
 600  
 caggaatgct tgcggctgct ggagttatgg atctcccacg gcgtgacgat tttccgcgtc  
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca gggtcatcgt  
 720  
 cgtcaccccc aggtcatctt cctggcagag gccttcaccc gtcccgagat gatca  
 775

<210> 1306  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<400> 1306  
 Xaa Ala Phe Cys Glu Ala Met Arg Val Tyr Ala Pro Arg Pro Leu Thr  
 1 5 10 15  
 Ser Pro Thr Leu Pro Ala Pro Leu Arg Val Glu Arg Arg Arg Ala Leu  
 20 25 30  
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val  
 35 40 45  
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu  
 50 55 60  
 Arg Leu Asp Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro  
 65 70 75 80  
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr  
 85 90 95  
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser  
 100 105 110  
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp  
 115 120 125  
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val  
 130 135 140  
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His  
 145 150 155 160  
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr  
 165 170 175  
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe  
 180 185 190  
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu  
 195 200 205  
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His  
 210 215 220  
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg  
 225 230 235 240  
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu  
 245 250 255  
 Met Ile

<210> 1307  
 <211> 624  
 <212> DNA  
 <213> Homo sapiens

<400> 1307  
 cggcgggtgg ggagtgcacaa gccccaggct ccctgcatcc cacttctggt gaggtcagtg  
 60

atgctgggca catgcgggtca gggccctgtg cctgagccgt ggaactccac agccattcca  
 120  
 catgttcagt cccacaccct gaggccaagg caccocgagt ccctgaggga gcaaggccct  
 180  
 gccacccgag gctgccgctg cagaggcaaa cagccccgag caaggcccgg caaccccagg  
 240  
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg ccggccagtc ggggtggcca  
 300  
 taggctaacg agaagccagg gcctccctcc cactgggct ttccacaaaa acctgactaa  
 360  
 tgtccaggga cagccaaagg ccttgaggct agctgggtgg aacaccttcc ccctaccatc  
 420  
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg  
 480  
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc  
 540  
 cctcccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gcccaagacc  
 600  
 tcccccaacc ttggtctgac gcgt  
 624

&lt;210&gt; 1308

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1308

Met	Ala	Thr	Pro	Thr	Gly	Arg	Gln	Pro	Gln	Ala	Arg	Leu	Cys	Leu	Pro
1				5				10					15		
His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20				25					30			
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
		35				40					45				
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
	50				55					60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65				70				75					80		
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
			85				90						95		
Ser	Pro	Pro	Ala												
			100												

&lt;210&gt; 1309

&lt;211&gt; 563

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1309

ntgatcatcg ccaaccacca gtccaactat gacctgttcg tgtttggcac gggagtggcc  
 60  
 taccgtactg tgtgtatcgg caaaaagagc ctgaaatggg tgccgctgtt cggtcagtgg  
 120  
 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgcccgtca  
 180



atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa  
 240  
 ggtacacgca acttcggtga aaccttgctg ccgttcaaga aaggtgcgtt ccagatggcg  
 300  
 attgccgcag gtgtgccgat cgtgcagggt tgtgtcagca cgtatgtgaa gcacatgaag  
 360  
 ctcaatcggt gggacagtgg cgatatattta attcgctcgt tgccgccaat tcctacgacc  
 420  
 ggactgacgt tggatgacat gccacggttg atggagacct gccgtcaaca aatgcgcgag  
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<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

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Trp	Val	Pro	Leu	Phe	Gly	Gln	Leu	Phe	Trp	Leu	Ala	Gly	Asn	Val	Leu
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Ile	Asp	Arg	Gly	Asn	Ala	His	Lys	Ala	Arg	Arg	Ser	Met	Leu	Thr	Thr
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Thr	His	Thr	Leu	Gln	His	Lys	Asp	Thr	Ser	Ile	Trp	Val	Phe	Ala	Glu
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Phe	Gln	Met	Ala	Ile	Ala	Ala	Gly	Val	Pro	Ile	Val	Gln	Val	Cys	Val
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Ser	Thr	Tyr	Val	Lys	His	Met	Lys	Leu	Asn	Arg	Trp	Asp	Ser	Gly	Asp
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Ile	Leu	Ile	Arg	Ser	Leu	Pro	Pro	Ile	Pro	Thr	Thr	Gly	Leu	Thr	Leu
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Asp	Asp	Met	Pro	Arg	Leu	Met	Glu	Thr	Cys	Arg	Gln	Gln	Met	Arg	Glu
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Cys	Ile	Glu	Ala	Met	Asp	Arg	Glu	Leu	Glu	Ile	Val	Pro	Cys	Arg	Asn
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<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

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&lt;210&gt; 1312

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1312

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			20					25					30		
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
			35					40					45		
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
			50					55					60		
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
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Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
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Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
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Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
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Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
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Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
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Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
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Gln	Val	Pro	Ala												

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 35 40 45  
 Ser Ser Ser Arg Ala Pro Leu Leu Ala Lys Thr Pro Leu Ser Thr Ser  
 50 55 60  
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro  
 65 70 75 80  
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro  
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<210> 1316  
 <211> 856  
 <212> PRT  
 <213> Homo sapiens

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 Lys Ser Gln Pro Gly Ser Ser Ala Ser Ser Ser Ser Gly Val Lys Met  
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 Gly Leu Pro Gln Gly Arg Asp Thr Thr Gln Leu Leu Ala Ser Glu Met  
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 Ser Pro Leu Arg Glu Glu Ala Ala Gly Ala Glu Asp Glu Lys Val Tyr  
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 Lys Trp Leu Lys Ser Pro Thr Thr Pro Ile Asp Pro Glu Lys Gln Trp  
 225 230 235 240  
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 245 250 255  
 Glu Tyr Thr Lys Ser Ile Glu Lys Leu Asn Ser Ser Leu His Phe Leu  
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Ser Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro
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Ser Pro Gln Ser Ser Asn Arg Lys Ser Ala Ser Phe Ser Val Lys Ser
      340              345              350
Gln Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg
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385              390              395
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Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly
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His Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser
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Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn
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Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Pro Lys Pro Val Phe
465              470              475
Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser
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Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp
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785					790					795					800
Thr	Lys	Lys	Met	Ile	Glu	Gly	Leu	Tyr	Lys	Tyr	Asn	Ser	Asp	Arg	Lys
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Gln	Phe	Ser	His	Ile	Pro	Ala	Lys	Thr	Leu	Ser	Ala	Ser	Val	Asp	Ala
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 <211> 1123  
 <212> DNA  
 <213> Homo sapiens

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 780  
 tgcggaagc gcttcgagaa gctggacagc gtcaagttcc acacgtcaa aagccacccg  
 840

gatcacaagc ccacctgacc cacctgacca ctgaccgccc ctatttatcc gtccgctcgg  
 900  
 acaccacagc cggggcttgc cggggcctgg acagctgcga gggccggccg gaccgcgggc  
 960  
 cggaaggagc gccccgccc cgccccagag ctggcgcccc tgggcagggt cccacccccg  
 1020  
 cccaccgca tccttctcgg agctgggtgcc tggggctgca ttgctggaac tgtgtcaaga  
 1080  
 gagcagagtg agattaaaga gcgagaaagg aaaaaaaaaa aaa  
 1123

<210> 1318

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

Xaa	Ala	Glu	Gly	Ile	His	Leu	Asn	Met	Ala	Ala	Gly	Ser	Gly	Val	Pro
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Gly	Ser	Gly	Leu	Gly	Glu	Glu	Val	Pro	Cys	Ala	Met	Met	Glu	Gly	Val
			20					25					30		
Ala	Ala	Tyr	Thr	Gln	Thr	Glu	Pro	Glu	Gly	Ser	Gln	Pro	Ser	Thr	Met
		35					40					45			
Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
50						55					60				
Leu	Cys	Leu	Leu	Lys	Lys	Glu	Glu	Lys	Glu	Glu	Pro	Val	Ala	Pro	Glu
65					70					75					80
Leu	Ala	Thr	Thr	Val	Pro	Glu	Ser	Ala	Glu	Pro	Glu	Ala	Glu	Ala	Asp
				85					90					95	
Gly	Glu	Glu	Leu	Asp	Gly	Ser	Asp	Met	Ser	Ala	Ile	Ile	Tyr	Glu	Ile
			100					105						110	
Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met
		115					120						125		
Asp	Ala	Asp	Gly	Leu	Leu	Glu	Met	Phe	His	Cys	Pro	Tyr	Glu	Gly	Cys
130						135					140				
Ser	Gln	Val	Tyr	Val	Ala	Leu	Ser	Ser	Phe	Gln	Asn	His	Val	Asn	Leu
145					150					155					160
Val	His	Arg	Lys	Gly	Lys	Thr	Lys	Val	Cys	Pro	His	Pro	Gly	Cys	Gly
				165					170					175	
Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
			180					185					190		
Ser	Gly	Val	Arg	Glu	Phe	Thr	Cys	Glu	Thr	Cys	Gly	Lys	Ser	Phe	Lys
		195					200						205		
Arg	Lys	Asn	His	Leu	Glu	Val	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Thr
		210				215						220			
Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
225				230						235					240
Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
				245					250					255	
Thr	Cys	Asp	Ala	Cys	Gly	Lys	Arg	Phe	Glu	Lys	Leu	Asp	Ser	Val	Lys
			260					265					270		
Phe	His	Thr	Leu	Lys	Ser	His	Pro	Asp	His	Lys	Pro	Thr			
		275					280					285			

<210> 1319  
 <211> 538  
 <212> DNA  
 <213> Homo sapiens

<400> 1319  
 cgggagcggga gccagctct tggctggtga tgagggcctg gaagcagatg gcctctcagt  
 60  
 cctccatttg ggaggactcc caaaatagtg caggctcgag ggggtgggga atggctcctg  
 120  
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttcctct gggagctccg tgggagagtg  
 180  
 gagtcatgca caagtcagag agcagttggg gaggaaccca gaagccctgg gatggtgtct  
 240  
 gcatgggaat gtgtaggagg gcagccacaa tgggcctggg ccttcctttc tctccttct  
 300  
 gtccccctcc cccatccccc tctctcctcc ctctcttctg gaaaccctagt actgggggaa  
 360  
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag  
 420  
 ttgcctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcatat  
 480  
 gtatggttgt gtgtgcatgg ggggtgggga ttctgacctg gggtcactcc caaagctt  
 538

<210> 1320  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 1320  
 Met Arg Ala Trp Lys Gln Met Ala Ser Gln Ser Ser Ile Trp Glu Asp  
 1 5 10 15  
 Ser Gln Asn Ser Ala Gly Ser Arg Gly Trp Gly Met Ala Pro Ala Glu  
 20 25 30  
 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp  
 35 40 45  
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln  
 50 55 60  
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr  
 65 70 75 80  
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser  
 85 90 95  
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr  
 100 105 110  
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala  
 115 120 125  
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val  
 130 135 140  
 Val Leu Cys Val Cys Ile Cys Met Val Val Cys Ala Trp Gly Trp Gly  
 145 150 155 160  
 Ile Leu Thr Trp Gly His Ser Gln Ser  
 165

<210> 1321  
<211> 1292  
<212> DNA  
<213> Homo sapiens

<400> 1321  
nacgctgacc gtcgctgac tccccgtgg tcgtgaccaa cgcggccggg ttcaccatct  
60  
cggaacgcag caatgatccg gcgtcagtcg tctcagtcac cgcaggatga cccggtgcaa  
120  
cgcccgatc gctcacggta cgcaacgacg aagcagggat cgctcagacc cgggcacgtc  
180  
atcgtcaaga agatttacaa caacaatgtc cttctcggcg tcaacgggtc ggggaccgaa  
240  
atggtcgtca atgctcgcgg tatcgctac ggacgacacc gcggggagat cgctgatgcc  
300  
tcgtcggccc agcgatatgt cgcagagggt gcctatcgca cgaccgccat cgcactactg  
360  
ctaacgaacg cactcacac cgagggtgcga gtggcacagg caatcgtcga attggcgcg  
420  
gaagagctgg gactcccca tgcccgacgg atgatgtgc ccatcctcga tcacctcgtc  
480  
gcagctgtgc accgagctaa gcagggggcc gtcactgatt tccccctgga atgggaagtc  
540  
cgtcagctct atcccgatga ggcggaactg ggccgacggc ctgtcgaaat cgtcgacgg  
600  
gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat  
660  
cagcgggtggg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac  
720  
gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca  
780  
tcccgttcg tccccacct tcgctatctg ttcgctcggg cctcggacaa caagcagctc  
840  
tctcacgttg acctggacat tgtgggactc atgtcagatc gctaccaga agccacattg  
900  
gcagctagcc aagtggccga gcacatatcg aaagcaatcg gcaacgacct gacggaagcc  
960  
gaaatcaact acatgcctt acacaccacc cggctctaca acgaggtgat ggggatggat  
1020  
gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat  
1080  
gaccttctg ccggaagcc agcaccaaaag tccccagat caaaattcag atgcgtgcct  
1140  
aattcccacc ccgacatcca agaggtcagg ggggggttgt tgggggtggt ggggtggggg  
1200  
gggggggttt gcatgctcag ggggtggggc tttgttgaag ccatcatgaa gttgcaaacc  
1260  
caggactgtt ccactagtaa agccctgcc tt  
1292

<210> 1322  
<211> 317  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1322

```

Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
 50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
      145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
      225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
      305          310          315

```

&lt;210&gt; 1323

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1323

```

cgcgtgatgg gaatgcgtca ctatgatgtt cagttgattg gtggtatcac tctgcacgaa
60
ggcaaaattg ctgagatgcg tacaggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

```

tacctcaatg cattgagtgg tcaggggtgtg catgtcatca ccgtcaatga ctatcttgca  
 180  
 caacgtgatg ctgaactcaa ccgcccatta tttaggtttt tgggtttaag catcgggtgtg  
 240  
 atttattcga tgcaaatgcc tgctgagaaa gcacaagctt atttagcaga cattacttac  
 300  
 ggtacc  
 306

<210> 1324

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1324

Arg	Val	Met	Gly	Met	Arg	His	Tyr	Asp	Val	Gln	Leu	Ile	Gly	Gly	Ile
1			5					10						15	
Thr	Leu	His	Glu	Gly	Lys	Ile	Ala	Glu	Met	Arg	Thr	Gly	Glu	Gly	Lys
		20						25					30		
Thr	Leu	Met	Gly	Thr	Leu	Ala	Cys	Tyr	Leu	Asn	Ala	Leu	Ser	Gly	Gln
		35					40					45			
Gly	Val	His	Val	Ile	Thr	Val	Asn	Asp	Tyr	Leu	Ala	Gln	Arg	Asp	Ala
	50					55					60				
Glu	Leu	Asn	Arg	Pro	Leu	Phe	Glu	Phe	Leu	Gly	Leu	Ser	Ile	Gly	Val
65					70					75				80	
Ile	Tyr	Ser	Met	Gln	Met	Pro	Ala	Glu	Lys	Ala	Gln	Ala	Tyr	Leu	Ala
			85					90						95	
Asp	Ile	Thr	Tyr	Gly	Thr										
					100										

<210> 1325

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1325

gtgcacatgg gccactggc gaatccgacg cgcggcctac ggcgcgcaat actggcggcc  
 60  
 attgtgcgcg catgttccgt ctccgctcat gccggaagct ggccagagaa accgatcacg  
 120  
 atggtcgtgc cgtttccgcg cggaggcggc accgatctcg tggcgcgctc gatccagccg  
 180  
 cttttgcagc gcgaactcgg acaaccgggtg gtgatcgaca accgcagcgg cgcaggcggc  
 240  
 acgctcggct ccagcttcgt ggcgcggggc gttgccgacg gctacacggc tggcgtggtc  
 300  
 accacgagca cccacgcggt aagcgtcgcg ctctatcccc ggctggccta caaccgaca  
 360  
 gcggactttg catacgcggc cttcatcggc n  
 391

<210> 1326

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
          20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
          35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
          50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
          85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
          100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
          115          120          125
Ile Gly
          130

```

<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga tttcggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
60
tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaatgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcatcgaccg gcgagccgct cgtcgatgcc
240
gcatgacgag agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
          20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
          35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

50                      55                      60  
 Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala  
 65                      70                      75                      80  
 Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg  
                     85                      90                      95  
 Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly  
                     100                      105

&lt;210&gt; 1329

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1329

nggtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc  
 60  
 ggcgatatcg gcatttacgc gatggcgacc ctggtggttg aactgctgga tagacaactc  
 120  
 cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc  
 180  
 tctgcaatgc aagctggtgc aagtcgtatt ggtgcatgt taggtcatga cttttgtacg  
 240  
 gtgagtttgt ctgatttatt aaccctcttg gaaactatta ataaacgtat tcatagtgc  
 300  
 ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag  
 360  
 ctttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta  
 420  
 ggtcgtcagt tgacgcgt  
 438

&lt;210&gt; 1330

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1330

Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser  
 1                      5                      10                      15  
 Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val  
                     20                      25                      30  
 Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu  
                     35                      40                      45  
 Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln  
                     50                      55                      60  
 Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr  
 65                      70                      75                      80  
 Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg  
                     85                      90                      95  
 Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro  
                     100                      105                      110  
 Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu  
                     115                      120                      125  
 Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu



130 135 140  
 Thr Arg  
 145

<210> 1331  
 <211> 453  
 <212> DNA  
 <213> Homo sapiens

<400> 1331  
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 60  
 catcttcttg ccggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc  
 120  
 tcggtgggta cgaacgtcac ccgatacctc ggccccatcc tcgacggacg gctggcaggg  
 180  
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gacccactca cgaccgcgcc  
 240  
 gtcggggcca tgcagttcat tccggccacc tgggccggat atgccagcga cggcaacggg  
 300  
 gacggaatca aggaccccaa caacgtcttc gatcgggcac tctcggcagc gaagtacctc  
 360  
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac  
 420  
 aacaactcgg ccgcttacgc agcaaactg atc  
 453

<210> 1332  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 1332  
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys  
 1 5 10 15  
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly  
 20 25 30  
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro  
 35 40 45  
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile  
 50 55 60  
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala  
 65 70 75 80  
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser  
 85 90 95  
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala  
 100 105 110  
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg  
 115 120 125  
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala  
 130 135 140  
 Ala Tyr Ala Ala Asn Val Ile  
 145 150

<210> 1333  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 1333  
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 60  
 ggacacagctc gtcggtcaag atgggtctag tgctgctcgt atggcggcgg aggcacccgc  
 120  
 gcgaagggtt aaagcggatg gactaagcca gcttgtcatc gatgtcaatg gagacgccgt  
 180  
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga  
 240  
 agtacacggt cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga  
 300  
 tacaatgatg aggtgtctaa gtattttccg gtccaccgga agaaccgcga gcagcgttct  
 360  
 ctcaatcaga tcgtcgacat cctgcacatc ggcggtctta tcgcctaccc gacagacacg  
 420  
 ggttatgcct tcggtgcccg gntagggatc aaggatgccg tggaccggat tcgcaaactt  
 480  
 cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcaggttggc  
 540

<210> 1334  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 1334  
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp  
 1 5 10 15  
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr  
 20 25 30  
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg  
 35 40 45  
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser  
 50 55 60  
 Gln Phe Ala Gln Val Gly  
 65 70

<210> 1335  
 <211> 748  
 <212> DNA  
 <213> Homo sapiens

<400> 1335  
 nctctcatatc tttttttccc ttttctatc cccctctctc ccgaccgcgt gaagcgttct  
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 gtgaatgccca agaagaagcg tcgtgaggtc ctcgatcagg cctccgggta ccgtgggtcag  
 120  
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcgccac ttattcgttc  
 180

cgtgaccgtc gtgctaagaa gggtgacttc cgctcgctgt ggatccagcg catcaatgct  
 240  
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc  
 300  
 gtcgaggtcg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac  
 360  
 agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat  
 420  
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg  
 480  
 ttcggcccgt cgtctttcat ctccggcggg acgcgatgag tccgggctgt tcttggtaga  
 540  
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggaac  
 600  
 ctccgaccca gctcgcatg ctgagcatgt cgaggtggct acatgtcgtg gcgttcgggt  
 660  
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat  
 720  
 cttcgcggta tgcggcagg ttacgcgt  
 748

&lt;210&gt; 1336

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1				5					10					15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp
			20					25					30		
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
	35						40					45			
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
	50					55					60				
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
65					70					75				80	
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
				85					90				95		
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
		100						105				110			
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
	115						120					125			
Ser	Gln	Pro	Gln	Asn	Ala	Ala									
	130					135									

&lt;210&gt; 1337

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1337

acgcgtgagg ccaggccact gggcacccgcc gttagccagg gcagcctcct tcagtgggtca  
 60

aggcagactc agtcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg  
 120  
 gcctcttgcc tcatgggtcag tgtgggtcag tgctttcgtc gtatgagact acaggggttc  
 180  
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg  
 240  
 ggcaactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcacc  
 300  
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg  
 360  
 gccc  
 364

<210> 1338  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 1338  
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala  
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 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu  
 20 25 30  
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu  
 35 40 45  
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu  
 50 55 60  
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr  
 65 70 75 80  
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala  
 85 90 95

<210> 1339  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens

<400> 1339  
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 60  
 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct  
 120  
 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg  
 180  
 gacgtgtggc agccggggcc aggcctgag attatcctta atctgccggc taccgtcgag  
 240  
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat  
 300  
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgatc gtggcacggc gatcgcgggc  
 360  
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc  
 420  
 gagcggcccg gcaccgtcga cctgggtcacc ctgggcatga acctcgtcag ccagggagt  
 480

gacgccggta tcgacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc  
 540  
 tgtctgccag taccggcccc ccagccctac tccggcgatc tgggtcttcac cgccttctcc  
 600  
 ggttcccacc aggacgccat caagaagggt ctggaagacc tggccccgcg cgc  
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1				5					10					15	
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
		35					40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
		50				55					60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65					70					75				80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
				85					90					95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100					105					110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly	
		115					120				125				
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
		130				135					140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145					150					155				160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
				165				170						175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
			180					185				190			
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
		195					200					205			
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
		210				215									

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

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 60  
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 120  
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc  
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct  
 240  
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt  
 300  
 ccagtggtc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc  
 360  
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccggtggt taatggatca  
 420  
 caagcccagag tggaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca  
 480  
 cgtcgtcgtc gccactccc caggatacct cgtaagcga caaacagagg atgtgcagat  
 540  
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggc ctgttgtgga  
 600  
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa  
 660  
 gctagc  
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1				5				10						15	
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
			35				40					45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50				55						60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65					70					75				80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
				85					90					95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
			115				120					125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130					135						140			
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145				150						155				160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
				165					170					175	
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180					185					190		
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
			195				200						205		
Leu															

<210> 1343  
 <211> 270  
 <212> DNA  
 <213> Homo sapiens

<400> 1343  
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 60  
 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt  
 120  
 ttaaaatttt tcctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac  
 180  
 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct  
 240  
 gtttctgaca acatgtttgt tcataacaac  
 270

<210> 1344  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 1344  
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg  
 1 5 10 15  
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp  
 20 25 30  
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn  
 35 40 45  
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe  
 50 55 60  
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala  
 65 70 75 80  
 Val Ser Asp Asn Met Phe Val His Asn Asn  
 85 90

<210> 1345  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 1345  
 agcgtttga aaccaccga tgacttgtcg gtgatcctgg gtaccgcgt cagcaacttc  
 60  
 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac  
 120  
 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg  
 180  
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc  
 240  
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc  
 300  
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag  
 360

tacgtttccg ggtttgagac cgactcgtgt atcgcccatt gc  
402

<210> 1346  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 1346  
Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg  
1 5 10 15  
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr  
20 25 30  
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro  
35 40 45  
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr  
50 55 60  
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg  
65 70 75 80  
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys  
85 90 95  
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg  
100 105 110  
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp  
115 120 125  
Ser Cys Ile Ala His Cys  
130

<210> 1347  
<211> 415  
<212> DNA  
<213> Homo sapiens

<400> 1347  
naccaccttc tgggcaggct ctcattcttt cattccaaga agcatttatt aaagactggc  
60  
tagggcgagg gaaccagct aggggctggg gataaaaaat aagaaataac tgaaggacct  
120  
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg  
180  
gcaccaaagc ggtcttgccg aaattgcctg aggcagggga aggggcacgc tttctgaaaa  
240  
acccccccaa accgattcca ggaagcccaa agggcgggccc ctctgccgc agcactgcct  
300  
tcacgtttac ttccatcccg gcctcctcct tcccctaagg cttggcatgc aacatccctg  
360  
cttctcacc acccttttatt taagactcct attatctgca cacaatggaa gtttag  
415

<210> 1348  
<211> 105  
<212> PRT  
<213> Homo sapiens



&lt;400&gt; 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1           5           10           15
Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
 100          105

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&lt;210&gt; 1349

&lt;211&gt; 924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1349

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gccgggatcg tcacaccaca gcaggctcgcg ttaccccatg acgtcttccg tgagcttggc
 60
gctcagacgg tcatgcgttc gatcgccgaa aagcttggcc ttccgggtcat cgtaaagccg
 120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttcctcag
 180
gccgtcgcga acgcctatgc ctatgacgac atggtttagt tcgaggaatt cattgtgggc
 240
aacgaactcg caataggcat gatcacgacg tctgaaggca cgcgtgtgct gccagccgct
 300
gagattcgcc ctgtcgggtg tgtttatgat tattcagcga tgtacaccgg tggtagaca
 360
cgactaacag ctcttcgaga cattagcgat acggcggccc aaaccgacgac ggcgatggcc
 420
cgagtcgtgc aaaaggagct cgattttctc gggatatctc gtgtcgatgc gatcgtggac
 480
gagtccggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
 540
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 600
gtcgtatgacg tcgctcgcaa ccatggctga cagtgtgcac acgaggggct cgcgccacgc
 660
cgtgcgcgtc aagcaggcat ctgtcgtctt gtcggcgctc gtccttgcca gtgtgatggt
 720
cttcctcgga ctgtggcaga tgaacgtttt tgagtcccaa cgtgacgact cgacgcaggc
 780
gcgtatcaac gagccagtga tcacctggaa tgaggcgctt aagaaggcca gtgtcatggc
 840
tcagtacgga cgcgggtga cggtagcggg cacgttccaa ccgtcgacca caaccttgat
 900
aggcacatcg tggccagtac gcgt
 924

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<210> 1350  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 1350  
 Ala Gly Ile Val Thr Pro Gln Gln Val Ala Leu Pro His Asp Val Phe  
 1 5 10 15  
 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu  
 20 25 30  
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly  
 35 40 45  
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn  
 50 55 60  
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly  
 65 70 75 80  
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val  
 85 90 95  
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser  
 100 105 110  
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile  
 115 120 125  
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln  
 130 135 140  
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp  
 145 150 155 160  
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met  
 165 170 175  
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp  
 180 185 190  
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His  
 195 200 205  
 Gly

<210> 1351  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 1351  
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 60  
 gacgagacgc aaaacgcatt gcttctcagt attctgctgc accccggtct gctcatcgtc  
 120  
 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg  
 180  
 gcccgacgg acgcatcggc cctctttctc tgaaccgccc tgtttgctc gctgctccag  
 240  
 ttcaagcaca tttacgtata cgtcgcgccg gcgtactttg tgtacctgct gcgtgcgtac  
 300  
 atgctcccga gcatgccgac gtccgcatcg acggggagcg cggcgatcga tcgcaccatc  
 360

aagcttggcg cagcgacgct ggtgccttcc tgctgagc  
398

<210> 1352  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 1352  
Xaa Cys Thr Glu Gly Val Leu Val Tyr Ala Leu Tyr Leu Leu Ser Arg  
1 5 10 15  
Cys Thr Met Gly Asp Glu Thr Gln Asn Ala Leu Leu Leu Ser Ile Leu  
20 25 30  
Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn  
35 40 45  
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp  
50 55 60  
Ala Ser Ala Leu Phe Leu  
65 70

<210> 1353  
<211> 480  
<212> DNA  
<213> Homo sapiens

<400> 1353  
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60  
accctcacac ccacccaccc cccagtcaca cggatcgtgc ggggcattgg acagcctcgg  
120  
ggcaacatgc tcctggtggg tatcgggggc agcggacgcc agagtctggc ccgcctgggt  
180  
tcatccatct gcgactacac caccttccag atcgagggtca ccaaacatta tcggaagcag  
240  
gagttccgag atgatatcaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg  
300  
tccttcattt ttgtggacac ccaaatagct gatgagtcct tcctagagga catcaacaac  
360  
atcctcagct caggcgaggt gccccatctt ttcaggcctg atgaatttga agagatccag  
420  
tcgcatatca tagaccaggc ccgggtggag caggtgcctg agtcacgga cagcctcttc  
480

<210> 1354  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 1354  
Xaa Ala Pro Ile Pro Ser Leu Gly Pro Gly Gly Pro Leu Ser Leu Leu  
1 5 10 15  
Ser Gln Leu Ile Thr Leu Thr Pro Thr Pro Pro Val Thr Arg Ile  
20 25 30  
Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

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<400> 1355
ngagaacgca ggtctccatc ctgacctgca ggcaaggggg actctactga cccctgaggt
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gccctgtcct agggccccacc cggtcagtgc acacctgctc cccagtcccg cctccacaaa
120
ggccctgtga gaccctgtcc tccaccgcct ctttccttgt gtccattccc tgagcctggg
180
gaagttgctg cagagccaca ggtcggngag acgctgagtc tgggcgagcg cttgctgccg
240
gacagctgga gaaacagcag cggggggccg tgtccatgtg gcaagccaag ccatcgaggg
300
gatcacaggc cccttcaggg aagggactga gcacctgcca cctgcctcca ggatgggcct
360
gatccccctt cctgtgtacc ccacaggctg cagtgcacct gccagcaca cactgcggg
420
ggcacctgcg accgctgctg ccccggttc aatcagcagc cgtggaagcc tgcgactgcc
480
aacagtgcca acgagtgcca gtcctgtaac tgctacggcc atgccaccga ctgttactac
540
gaccttgagg tggaccggcg ccgcgccagc cagagcctgg atggcaccta tcagggtggg
600
ggtgtctgta tcgactgcca gcaccacacc gccggcgtca actgtgagcg ctgcctgcc
660
ggcttctacc gctctcccaa ccacctctc gactcgcccc acgtctgccg ccgctgcaac
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840
tgctaccgga cgccctcgtc ctccaatgac accagggagc aggtgctgcc agccggccag
900
attgtgaatt gtgactgcag cgcggcaggg acccagggca acgcctgccg gaaggaccga
960

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aggggtggggcc gctgtttttgc caacccccaac ttccaaggca cccattgtga gctctgcgcg  
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 ccagggttct acggccccgg ctgccctggg tcccttcacg cgt  
 1063

<210> 1356  
 <211> 244  
 <212> PRT  
 <213> Homo sapiens

<400> 1356  
 Ala Pro Ala Thr Cys Leu Gln Asp Gly Pro Asp Pro Pro Ser Cys Val  
 1 5 10 15  
 Pro His Arg Leu Gln Cys Thr Cys Gln His Asn Thr Cys Gly Gly Thr  
 20 25 30  
 Cys Asp Arg Cys Cys Pro Gly Phe Asn Gln Gln Pro Trp Lys Pro Ala  
 35 40 45  
 Thr Ala Asn Ser Ala Asn Glu Cys Gln Ser Cys Asn Cys Tyr Gly His  
 50 55 60  
 Ala Thr Asp Cys Tyr Tyr Asp Pro Glu Val Asp Arg Arg Arg Ala Ser  
 65 70 75 80  
 Gln Ser Leu Asp Gly Thr Tyr Gln Gly Gly Val Cys Ile Asp Cys  
 85 90 95  
 Gln His His Thr Ala Gly Val Asn Cys Glu Arg Cys Leu Pro Gly Phe  
 100 105 110  
 Tyr Arg Ser Pro Asn His Pro Leu Asp Ser Pro His Val Cys Arg Arg  
 115 120 125  
 Cys Asn Cys Glu Ser Asp Phe Thr Asp Gly Thr Cys Glu Asp Leu Thr  
 130 135 140  
 Gly Arg Cys Tyr Cys Arg Pro Asn Phe Ser Gly Glu Arg Cys Asp Val  
 145 150 155 160  
 Cys Ala Glu Gly Phe Thr Gly Phe Pro Ser Cys Tyr Pro Thr Pro Ser  
 165 170 175  
 Ser Ser Asn Asp Thr Arg Glu Gln Val Leu Pro Ala Gly Gln Ile Val  
 180 185 190  
 Asn Cys Asp Cys Ser Ala Ala Gly Thr Gln Gly Asn Ala Cys Arg Lys  
 195 200 205  
 Asp Pro Arg Val Gly Arg Cys Phe Ala Asn Pro Asn Phe Gln Gly Thr  
 210 215 220  
 His Cys Glu Leu Cys Ala Pro Gly Phe Tyr Gly Pro Gly Cys Pro Gly  
 225 230 235 240  
 Ser Leu His Ala

<210> 1357  
 <211> 663  
 <212> DNA  
 <213> Homo sapiens

<400> 1357  
 ntcccccccc ccccgggggg gggggggggg ggaaacaaca ccagaaaagt agacagatac  
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 ccaagttggt ccagctggtc catatacggc cccaggtgcg gattcggtac cgaagttgaa  
 120

ttcaacaccc ccgttttgcc tgtggggggg gtacgccctg taatcctgca aaggcccggg  
 180  
 tgggtgtccgg ggggttttctg cggctctcccc aaccatcatc tagacggcgt ggcgatgtgg  
 240  
 tgcgagctgc ttgcggcggg gttctgtgcc cgagcttgcc tcgcctggct gcaagaatcc  
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<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

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Val	Asp	Arg	Tyr	Pro	Ser	Trp	Ser	Ser	Trp	Ser	Ile	Tyr	Gly	Pro	Arg
			20					25					30		
Cys	Gly	Phe	Gly	Thr	Glu	Val	Glu	Phe	Asn	Thr	Pro	Val	Leu	Pro	Val
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Gly	Gly	Val	Arg	Pro	Val	Ile	Leu	Gln	Arg	Pro	Gly	Trp	Cys	Pro	Gly
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Val	Phe	Val	Gly	Leu	Pro	Asn	His	His	Leu	Asp	Gly	Val	Ala	Met	Trp
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Cys	Glu	Leu	Leu	Ala	Ala	Val	Phe	Cys	Ala	Arg	Ala	Cys	Leu	Ala	Trp
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Leu	Gln	Glu	Ser	Leu	Ala	His	Arg	Ala	Ser	Ala	Ser	Val	Lys	Ser	Gln
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Leu	Arg	Arg	Asp	Ile	Leu	Gln	Ala	Arg	Leu	Ser	Arg	Pro	Thr	Asp	Ala
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Thr	Met	Pro	Ser	Arg	Thr	Leu	Ile	Ser	Leu	Met	Thr	Thr	Gly	Leu	Asp
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Ala	Leu	Asp	Gly	Tyr	Tyr	Ser	Lys	Tyr	Leu	Pro	Gln	Leu	Val	Leu	Ala
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Val	Ile	Val	Pro	Ala	Val	Leu	Ala	Thr	Ala	Ile	Gly	Leu	Asn	Asp	Leu
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Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val	Phe
			180					185					190		
Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg	Phe
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Lys	Val	Ala	Thr	Arg	Leu	Ala	Asn	His	Phe	Ala	Asp	Leu			

210

215

220

&lt;210&gt; 1359

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1359

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 423

&lt;210&gt; 1360

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1360

Met	Leu	Asp	Asp	Ile	Pro	Gly	Leu	Thr	Leu	Ser	Leu	Val	Asp	Ala	Ser
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Glu	Ser	Ala	Asp	Leu	Arg	Phe	Thr	Cys	Asp	Ser	Tyr	Thr	Lys	Glu	Asp
			20					25					30		
Asp	Val	Phe	Tyr	Pro	Leu	Trp	Glu	Asp	Asp	Tyr	Val	Val	Ala	Met	Pro
		35					40					45			
Val	Gly	Tyr	Trp	Leu	Ala	Asp	Tyr	Thr	Ser	Leu	Ser	Ile	Lys	Gln	Ile
		50				55					60				
Asp	Lys	Gln	Pro	Phe	Val	Ser	Arg	Thr	Pro	Cys	Asp	Ile	Leu	Glu	Ser
65				70						75				80	
Trp	Asn	Phe	Ile	Met	Gln	Lys	Gln	Gly	Leu	Ser	Thr	Asp	Val	Arg	Ala
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&lt;210&gt; 1361

&lt;211&gt; 5300

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1361

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<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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			20					25					30		
Gln	Arg	Cys	Leu	Pro	Val	Phe	Glu	Asn	Ala	Ala	Phe	Gly	Arg	Leu	Ala
		35					40					45			
Gln	Ala	Ser	His	Thr	Cys	Gly	Ser	Pro	Pro	Glu	Asp	Phe	Cys	Pro	His
	50					55					60				
Val	Gly	Ala	Ala	Gly	Ala	Gly	Ala	His	Cys	Gln	Arg	Cys	Asp	Ala	Ala
65					70					75				80	
Asp	Pro	Gln	Arg	His	His	Asn	Ala	Ser	Tyr	Leu	Thr	Asp	Phe	His	Ser
				85					90					95	
Gln	Asp	Glu	Ser	Thr	Trp	Trp	Gln	Ser	Pro	Ser	Met	Ala	Phe	Gly	Val
			100				105						110		
Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
		115				120						125			
Glu	Ile	Thr	Tyr	Val	Arg	Leu	Lys	Phe	His	Thr	Ser	Arg	Pro	Glu	Ser
	130					135						140			
Phe	Ala	Ile	Tyr	Lys	Arg	Ser	Arg	Ala	Asp	Gly	Pro	Trp	Glu	Pro	Tyr
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Gln	Phe	Tyr	Ser	Ala	Ser	Cys	Gln	Lys	Thr	Tyr	Gly	Arg	Pro	Glu	Gly
			165						170					175	
Gln	Tyr	Leu	Arg	Pro	Gly	Glu	Asp	Glu	Arg	Val	Ala	Phe	Cys	Thr	Ser
		180						185					190		
Glu	Phe	Ser	Asp	Ile	Ser	Pro	Leu	Ser	Gly	Gly	Asn	Val	Ala	Phe	Ser
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Thr	Leu	Glu	Gly	Arg	Pro	Ser	Ala	Tyr	Asn	Phe	Glu	Glu	Ser	Pro	Gly
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Leu	Gln	Glu	Trp	Val	Thr	Ser	Thr	Glu	Leu	Leu	Ile	Ser	Leu	Asp	Arg
225				230						235				240	
Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
			245						250					255	
Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

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 Ala Cys Arg Cys Gln His Asn Thr Thr Gly Thr Asp Cys Glu Arg Cys  
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 Ala His Glu Cys Leu Pro Cys Asn Cys Ser Gly Arg Ser Glu Glu Cys  
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 His His Cys Arg Asp His Thr Ala Gly Pro His Cys Glu Arg Cys Gln  
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 Cys Gln Ser Ala Gly Ser Leu His Leu Gln Cys Asp Asp Thr Gly Thr  
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 Pro Gly Phe His Ser Leu Ser Glu Gly Gly Cys Arg Pro Cys Thr Cys  
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 Pro Cys Lys Glu Asn Val Glu Gly Asn Leu Cys Asp Arg Cys Arg Pro  
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 Gly Thr Phe Asn Leu Gln Pro His Asn Pro Ala Gly Cys Ser Ser Cys  
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 Val His His Ile Leu Ser Asp Phe His Gln Gly Ala Glu Gly Trp Trp  
 500 505 510  
 Ala Arg Ser Val Gly Gly Ser Glu His Ser Pro Gln Trp Ser Pro Asn  
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 Phe Gln Arg Leu Leu Ala Asn Leu Thr Ser Leu Arg Leu Arg Val Ser  
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Val Pro Cys Thr Cys Asn Gln His Gly Thr Cys Asp Pro Asn Thr Gly		
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Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys		
	725	730
Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys		735
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Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu		750
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Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg		765
	770	775
Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		780
785	790	795
Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val		
	805	810
Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu		815
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Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu		830
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Gly Phe Tyr Gly Ser Ala Leu Ala Pro Arg Pro Ala Asp Lys Cys Met		845
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Pro Cys Ser Cys His Pro Gln Gly Ser Val Ser Glu Gln Met Pro Cys		860
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Asp Pro Val Thr Gly Gln Cys Ser Cys Leu Pro His Val Thr Ala Arg		
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Gly Cys Arg Ser Cys Lys Cys His Pro Leu Gly Ser Gln Glu Asp Gln		910
	915	920
Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly		925
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Gln Ala Cys Asp Arg Cys Gln Leu Gly Phe Phe Gly Ser Ser Ile Lys		940
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Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln		
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Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr		975
	980	985
Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr		990
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His Cys Gln Gln Cys Pro Ser Cys Tyr Ala Leu Val Lys Glu Glu Thr		1005
	1010	1015
Ala Lys Leu Lys Ala Arg Leu Thr Leu Thr Glu Gly Trp Leu Gln Gly		1020
1025	1030	1035
Ser Asp Cys Gly Ser Pro Trp Gly Pro Leu Asp Ile Leu Leu Gly Glu		
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Ala Pro Arg Gly Asp Val Tyr Gln Gly His His Leu Leu Pro Gly Ala		1055
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Arg Glu Ala Phe Leu Glu Gln Met Gly Leu Glu Gly Ala Val Lys		1070
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	1090	1095
Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala		1100
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Val Leu Glu Ser Ser Glu Glu Glu Ile Leu His Ala Ala Ala Ile Leu		1120

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Ser	His	Leu	Ala	Ile	Glu	Ala	Arg	Ala	Leu	Ala	Arg	Ser	His	Arg	Asp
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Glu	Ser	Val	Leu	Ala	Thr	Val	Arg	Gln	Val	Gly	Ala	Asp	Thr	Ala	Pro
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Tyr	Leu	Ala	Leu	Leu	Ala	Ser	Pro	Gly	Ala	Leu	Pro	Gln	Lys	Ser	Arg
				1250						1255				1260	
Ala	Glu	Asp	Leu	Gly	Leu	Lys	Ala	Lys	Ala	Leu	Glu	Lys	Thr	Val	Ala
1265					1270					1275					1280
Ser	Trp	Gln	His	Met	Ala	Thr	Glu	Ala	Ala	Arg	Thr	Leu	Gln	Thr	Ala
				1285						1290				1295	
Ala	Gln	Ala	Thr	Leu	Arg	Gln	Thr	Glu	Pro	Leu	Thr	Met	Ala	Arg	Ser
				1300						1305				1310	
Arg	Leu	Thr	Ala	Thr	Phe	Ala	Ser	Gln	Leu	His	Gln	Glu	Ala	Arg	Ala
				1315						1320				1325	
Ala	Leu	Thr	Gln	Ala	Ser	Ser	Ser	Val	Gln	Ala	Ala	Thr	Val	Thr	Val
				1330						1335				1340	
Met	Gly	Ala	Arg	Thr	Leu	Leu	Ala	Asp	Leu	Glu	Gly	Met	Lys	Leu	Gln
1345					1350					1355					1360
Phe	Pro	Arg	Pro	Lys	Asp	Gln	Ala	Ala	Leu	Gln	Arg	Lys	Ala	Asp	Ser
				1365						1370				1375	
Val	Ser	Asp	Arg	Leu	Leu	Ala	Asp	Thr	Arg	Lys	Lys	Thr	Lys	Gln	Ala
				1380						1385				1390	
Glu	Arg	Met	Leu	Gly	Asn	Ala	Ala	Pro	Leu	Ser	Ser	Ser	Ala	Lys	Lys
				1395						1400				1405	
Lys	Gly	Arg	Glu	Ala	Glu	Val	Leu	Ala	Lys	Asp	Ser	Ala	Lys	Leu	Ala
				1410						1415				1420	
Lys	Ala	Leu	Leu	Arg	Glu	Arg	Lys	Gln	Ala	His	Arg	Arg	Ala	Ser	Arg
1425					1430					1435					1440
Leu	Thr	Ser	Gln	Thr	Gln	Ala	Thr	Leu	Gln	Gln	Ala	Ser	Gln	Gln	Val
				1445						1450				1455	
Leu	Ala	Ser	Glu	Ala	Arg	Arg	Gln	Glu	Leu	Glu	Glu	Ala	Glu	Arg	Val
				1460						1465				1470	
Gly	Ala	Gly	Leu	Ser	Glu	Met	Glu	Gln	Gln	Ile	Arg	Glu	Ser	Arg	Ile
				1475						1480				1485	
Ser	Leu	Glu	Lys	Asp	Ile	Glu	Thr	Leu	Ser	Glu	Leu	Leu	Ala	Arg	Leu
				1490						1495				1500	
Gly	Ser	Leu	Asp	Thr	His	Gln	Ala	Pro	Ala	Gln	Ala	Leu	Asn	Glu	Thr
1505					1510					1515					1520
Gln	Trp	Ala	Leu	Glu	Arg	Leu	Arg	Leu	Gln	Leu	Gly	Ser	Pro	Gly	Ser
				1525						1530				1535	
Leu	Gln	Arg	Lys	Leu	Ser	Leu	Leu	Glu	Gln	Glu	Ser	Gln	Gln	Gln	Glu
				1540						1545				1550	
Leu	Gln	Ile	Gln	Gly	Phe	Glu	Ser	Asp	Leu	Ala	Glu	Ile	Arg	Ala	Asp

1555                      1560                      1565  
 Lys Gln Asn Leu Glu Ala Ile Leu His Ser Leu Pro Glu Asn Cys Ala  
 1570                      1575                      1580  
 Ser Trp Gln  
 1585

<210> 1363  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1363  
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 gaaggcgcca ccgaagacaa ggacgtagag gaaagccgcg ctgtgctcga aggcgcagca  
 120  
 ggaatctcgg aaaccgacaa agatgcggct gtttgagtgg atgtgaagga agatgcaggt  
 180  
 gtctcatcgg cggggccacc atgaacaacc cttcttgatg ccccgtaggt gacgcgctca  
 240  
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga  
 300  
 cccatgcact tgcgtgcctg gaggcattggc taccaggcaa tcccctcatt tccagaatga  
 360  
 gcctgttttt gaaagcgact aggggaagttc ag  
 392

<210> 1364  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1364  
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 1                      5                      10                      15  
 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu  
 20                      25                      30  
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu  
 35                      40                      45  
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro  
 50                      55                      60  
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu  
 65                      70                      75                      80  
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu  
 85                      90                      95  
 Arg Leu Gln Trp Arg Leu Tyr Pro  
 100

<210> 1365  
 <211> 451  
 <212> DNA  
 <213> Homo sapiens

<400> 1365

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 ctacagcggg ccttggttca ggatcgccaa gaggcgcctt ggaatgaggt ggatgaggtc  
 120  
 tggcccaatg tcttcatagc tgagaagagt gtggctgtga acaaggggag gctgaagagg  
 180  
 ctgggaatca cccacattct gaatgctgcy catggcaccg gcgtttacac tggccccgaa  
 240  
 ttctacactg gcctggagat ccagtacctg ggtgtagagg tggatgactt tcctgaggtg  
 300  
 gacatttccc agcatttccg gaaggcgtct gagttcctgg atgaggcgct gctgacttac  
 360  
 agaggggaaag tcctggtcag cagcgaaatg ggcatcagcc ggtcagcagt gctggtggtc  
 420  
 gcctacctga tgatcttcca caacatggcc a  
 451

<210> 1366

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1366

Xaa	Arg	Val	Arg	Glu	Lys	Met	Asp	Asp	Thr	Ser	Leu	Tyr	Asn	Thr	Pro
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Cys	Val	Leu	Asp	Leu	Gln	Arg	Ala	Leu	Val	Gln	Asp	Arg	Gln	Glu	Ala
			20					25					30		
Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35				40					45				
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
	50				55					60					
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
65				70					75					80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85					90						95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
		100					105					110			
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
	115					120					125				
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
	130					135					140				
Ile	Phe	His	Asn	Met	Ala										
145					150										

<210> 1367

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1367

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 60  
 cgccgatacg cgccaacgcc gtagaccgcy aacgctggct caccggcgcc gctgtactgc  
 120



tcgtcgtcgc attgctgctg gtcacgtcgc cactgcccgt cagcgcactc gtcggccaga  
 180  
 gcttcttcga ccgcgaaggc gccttcgtcg gcctcgccaa cttegctcgc tacctcgaca  
 240  
 accccgccct ggtccagtc gccttcaaca gcctctggct ggccgcgatc agcgccgtca  
 300  
 tctgcaccgc catcgctac gtctacgct  
 330

<210> 1368

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1368

Thr	Ala	Asn	Ala	Gly	Ser	Pro	Ala	Pro	Leu	Tyr	Cys	Ser	Ser	Ser	His
1				5				10					15		
Cys	Cys	Trp	Ser	Ser	Ser	His	Cys	Pro	Ser	Ala	His	Ser	Ser	Ala	Arg
			20					25					30		
Ala	Ser	Ser	Thr	Ala	Lys	Ala	Pro	Ser	Ser	Ala	Ser	Pro	Thr	Ser	Leu
		35					40					45			
Ala	Thr	Ser	Thr	Thr	Pro	Pro	Trp	Ser	Ser	Pro	Pro	Ser	Thr	Ala	Ser
	50					55					60				
Gly	Trp	Pro	Arg	Ser	Ala	Pro	Ser	Ser	Ala	Pro	Pro	Ser	Pro	Thr	Ser
65					70					75				80	
Thr	Arg														

<210> 1369

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1369

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 60  
 catcacctgt acgtactgca ggctctcatg ctggggctgc tggagccgcg catgcggacg  
 120  
 cccttgacc cctacagcca ggagcagcgg gacgagctgc aggtcctacg ccaggctgcc  
 180  
 ttcgaggtgg agggggagtc ctggggtgcc gggctaagtg ctgaccgtcg ccgttccttc  
 240  
 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag  
 300  
 cgcgtgcccc ccggtctgct ggccctggac aacatgttgt acttctccag aaacgc  
 356

<210> 1370

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1370

Met Gly Asp Glu Met Ala His His Leu Tyr Val Leu Gln Ala Leu Met

```

      1           5           10           15
Leu Gly Leu Leu Glu Pro Arg Met Arg Thr Pro Leu Asp Pro Tyr Ser
      20           25           30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
      35           40           45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
      50           55           60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
      65           70           75           80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
      85           90           95
Asn Met Leu Tyr Phe Ser Arg Asn
      100

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<210> 1371  
 <211> 648  
 <212> DNA  
 <213> Homo sapiens

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<400> 1371
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tggttcagcgg ttggattagc cagttctgca gactggctca caccagacc atctggaccg
120
cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac
180
tttgccctct aagaagccta ctttcctctt ttcctctcct cctctcccta tttctctttg
240
ttgagagagc agtcagatta acccaacaac tcttggagtg ccttgggtcac ctgagagcat
300
ggaaagtcca tgccttcacc agagtaatga ctaccatttc tccaaaactc tcctcatgcc
360
atccgatagg cagtattgat cagaagggga aatctagtgt gttaaaattg ataaaccagc
420
ttaagttata cctacaataa aagaccacgc cttagcccat ggctgaatgt tgaatactgt
480
tgcattgaaa tttgggattt ctagttagag gctttataaa ggtagaatca tgcagacaca
540
tatacctgga aatattcgga acattctatt agcagaaatg caatgtagga agcttattgg
600
ttctagaaga atgtgtcatt gtcagtaatt ggaattactg acagatct
648

```

<210> 1372  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

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<400> 1372
Met Phe Gln Val Pro Ser Phe Leu Cys Leu Leu Phe Ser Trp Val Leu
      1           5           10           15
Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Leu Ser Leu
      20           25           30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

```

```

          35          40          45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
          50          55          60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
65          70          75          80
Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
          85          90          95
Lys Leu Tyr Leu Gln
          100

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<210> 1373  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

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<400> 1373
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60
tgcaggcgcc ctgcatggca gagaactttt tccaccacaa ccttcgtgta acaggcagtt
120
acatgggttt catgggtcga catgggttcc gtgtcctgct tgccgggcct gagctgtttg
180
tcagggtgtac aaccgagaac cttgcagacc agaatccaag actccgcagc atgtgtgtgc
240
cggggcggga cagcagctgt tggaggagaa agccatcagt gtatttagag gcaaagggct
300
tcctaaatcg aggctgtgca ggcctcctga aagtccttac ccaagcttcc gaggtaaatc
360
ctctccgca
369

```

<210> 1374  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1374
Met Ala Glu Asn Phe Phe His His Asn Leu Arg Val Thr Gly Ser Tyr
1          5          10          15
Met Gly Phe Met Gly Arg His Gly Phe Arg Val Leu Leu Ala Gly Pro
          20          25          30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
          35          40          45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
          50          55          60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65          70          75          80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
          85          90          95
Leu Arg

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<210> 1375  
 <211> 282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1375

nacgcgttcg accgcgccac gcgcgggcac gttatcgact acatcgactt tcacctgcac  
 60  
 ggctggcact ggcccgcctt caacatcgct gacatggcca tcgtgggcgg ggcgatcgcg  
 120  
 ctggtggccc agtcgttcat gagcgtggag aaccggccg ccacaaagga gtcccagtga  
 180  
 cattgggacg atccggaaat tcgcaatgca cacggtgcag gacaccaatc tgaagagaac  
 240  
 ggccccagc atgagcggcc gcggcttggc cctcatgcta gc  
 282

&lt;210&gt; 1376

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1376

Xaa	Ala	Phe	Asp	Arg	Ala	Thr	Arg	Gly	His	Val	Ile	Asp	Tyr	Ile	Asp
1				5					10					15	
Phe	His	Leu	His	Gly	Trp	His	Trp	Pro	Ala	Phe	Asn	Ile	Ala	Asp	Met
			20					25				30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
		35				40					45				
Val	Glu	Asn	Pro	Ala	Ala	Thr	Lys	Glu	Ser	Gln					
	50					55									

&lt;210&gt; 1377

&lt;211&gt; 6306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1377

tagtaagaca ggtgccttca gttcactctc agtaaggggc tggttgcctg catgagtgtg  
 60  
 tgctctgtgt cactgtggat tggagttgaa aaagcttgac tggcgtcatt caggagctgg  
 120  
 atggcgtggg acatgtgcaa ccaggactct gagtctgtat ggagtgcacat cgagtgtgct  
 180  
 gctctggttg gtgaagacca gcctctttgc ccagatcttc ctgaacttga tctttctgaa  
 240  
 ctagatgtga acgacttggga tacagacagc tttctgggtg gactcaagtg gtgcagtgcac  
 300  
 caatcagaaa taatatccaa tcagtacaac aatgagcctt caaacatatt tgagaagata  
 360  
 gatgaagaga atgaggcaaa cttgctagca gtcctcacag agacactaga cagtctccct  
 420  
 gtggatgaag acggattgcc ctcatctgat gcgctgacag atggagacgt gaccactgac  
 480  
 aatgaggcta gtccttcctc catgcctgac ggcacccctc caccacagga ggcagaagag  
 540

ccgtctctac ttaagaagct cttactggca ccagccaaca ctcagctaag ttataatgaa  
600  
tgcagtgggc tcagtaccca gaaccatgca aatcacatc acaggatcag aacaaaccct  
660  
gcaattgtta agactgagaa ttcattggagc aataaagcga agagtatttg tcaacagcaa  
720  
aagccacaaa gacgtccctg ctcggagctt ctcaaatac tgaccacaaa cgatgaccct  
780  
cctcacacca aaccacaga gaacagaaac agcagcagag acaaatgcac ctccaaaaag  
840  
aagtcaccaca cacagtcgca gtcacaacac ttacaagcca aaccaacaac tttatctctt  
900  
cctctgaccc cagagtcacc aaatgacccc aagggttccc catttgagaa caagactatt  
960  
gaacgcacct taagtgtgga actctctgga actgcaggcc taactccacc caccactcct  
1020  
cctcataaag ccaaccaaga taaccctttt agggcttctc caaagctgaa gtcctcttgc  
1080  
aagactgtgg tgccaccacc atcaaagaag ccaggtaca gtgagtcttc tggtagacaa  
1140  
ggcaataact ccaccaagaa agggccggag caatccgagt tgtatgcaca actcagcaag  
1200  
tcctcagtcc tctctgtgg acacaggaa aggaagacca agcgccccag tctgcggtg  
1260  
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1320  
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1380  
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1440  
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1500  
gagctgaaca agcacttcgg tcatccagc caagctgtt ttgacgacga agcagacaag  
1560  
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1620  
ataaattcag gactagccat ggatggcctg tttgatgaca gcgaagatga aagtataaa  
1680  
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1740  
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1800  
agaccccaaa ggatgcgctc tcgttcaagg tcttttctc gacacaggtc gtgttcccga  
1860  
tcaccatatt ccaggtcaag atcaaggtct ccaggcagta gatcctctc aagatcctgc  
1920  
tattactatg agtcaagcca ctacagacac cgcacgcacc gaaattctcc cttgtatgtg  
1980  
agatcacgtt caagatcgcc ctacagccgt cggcccaggt atgacagcta cgaggaatat  
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2100  
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2160

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2280  
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2340  
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2400  
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2460  
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2580  
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2640  
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2700  
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2760  
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2820  
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2880  
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2940  
gcagcagttc catgaagaca cacttaaac ctagaacttc aaaatgttcg tattctattc  
3000  
aaaaggaaaa atatatatat atatatatat atataaatta aaaaggaaag aaaactaaca  
3060  
accaaccaac caaccaacca accacaaacc accctaaaat gacagccgct gatgtctggg  
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3180  
tctcataacg taatgattat atgacaatcc tgaagaaacc acaggttcca tagaactaat  
3240  
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3300  
gaatctgggt gggagaggat actgcgggca ccagaatgct aaagtttcct aacattttga  
3360  
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3420  
cactgcaaat ttcaaaagcc ttgtcaatgg tcaagcgtgc agcttggtca gcggttcttt  
3480  
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3540  
gttcagatag tgtaattgct acattctctg atgtagttaa gtatttacag atgttaaagt  
3600  
gagtattttt attttatgta tatactatac aacaatgttc ttttttgta cagctatgca  
3660  
ctgtaaatgc agccttcttt tcaaaactgc taaatttttc ttaatcaaga atattcaaat  
3720  
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3780

tatatatatt tgattgtaca aacaaaaaga cagtgtgtgt gtctgttgag tgcaacaaga  
3840  
gcaaaatgat gctttccgca catccatccc ttaggtgagc ttcaatctaa gcatcttgtc  
3900  
aagaaatatt ctagtcccct aaaggtatta accacttctg cgatattttt ccacattttc  
3960  
ttgtcgcttg tttttctttg aagttttata cactggattt gttaggggaa tgaaattttc  
4020  
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4080  
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&lt;210&gt; 1378

&lt;211&gt; 798

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1378

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Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
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Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile
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Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys
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Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser
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Glu Leu Leu Lys Tyr Leu Thr Asn Asp Asp Pro Pro His Thr Lys
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Asn Gln Asp Asn Pro Phe Arg Ala Ser Pro Lys Leu Lys Ser Ser Cys
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Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His
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Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile
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His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys
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<212> DNA
<213> Homo sapiens
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 <212> PRT  
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 Ala Leu Trp Pro Arg His Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys  
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 Gly Arg Val Xaa Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys Gly Arg  
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 85 90 95  
 Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa Pro Pro  
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 Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser  
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 Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg  
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 Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg  
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<210> 1385  
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 <213> Homo sapiens

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<210> 1388  
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<210> 1389  
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1389

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 tctatttaaa taaagtctct ctgacttttt gtgtctccaa aaccaggaat tccattcctg  
 3900  
 attttcttct ggtggccgaa gggctggaca cagacttctc ccaaccatca gagggcacag  
 3960  
 agtgtggagg ttaagtgtg ggcagcagtg gagcattagg ggcagctgga tcc  
 4013

&lt;210&gt; 1390

&lt;211&gt; 1156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1390

Pro	Leu	Lys	Met	Glu	Thr	Ser	Gly	Met	Thr	Thr	Pro	Ser	Leu	Lys	Thr
1				5					10					15	
Asp	Gly	Gly	Arg	Arg	Thr	Ala	Thr	Ser	Pro	Pro	Pro	Thr	Thr	Ser	Gln
			20					25					30		
Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
			35				40					45			
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
			50			55					60				
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70				75					80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85					90						95	
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
			115			120						125			
Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

130	135	140
Asp Ala Asp Phe Ser Thr Gly Arg Gly Thr Thr Phe Tyr Gln Glu Tyr		
145	150	155
Glu Thr Phe Tyr Gly Glu His Ser Leu Leu Val Gln Gln Ala Glu Ser		
	165	170
Trp Ile Arg Lys Ile Thr Asn Asn Gly Gly Tyr Lys Ala Arg Trp Ala		
	180	185
Leu Lys Val Thr Trp Val Asn Ala His Ala Tyr Pro Ala Gln Trp Thr		
	195	200
Leu Gly Ser Asn Thr Tyr Gln Ala Ile Leu Ser Thr Asp Gly Ser Arg		
	210	215
Ser Tyr Ala Leu Phe Leu Tyr Gln Ser Gly Gly Met Gln Trp Asp Val		
225	230	235
Ala Gln Arg Ser Gly Asn Pro Val Leu Met Gly Phe Ser Ser Gly Asp		
	245	250
Gly Tyr Phe Glu Asn Ser Pro Leu Met Ser Gln Pro Val Trp Glu Arg		
	260	265
Tyr Arg Pro Asp Arg Phe Leu Asn Ser Asn Ser Gly Leu Gln Gly Leu		
	275	280
Gln Phe Tyr Arg Leu His Arg Glu Glu Arg Pro Asn Tyr Arg Leu Glu		
	290	295
Cys Leu Gln Trp Leu Lys Ser Gln Pro Arg Trp Pro Ser Trp Gly Trp		
305	310	315
Asn Gln Val Ser Cys Pro Cys Ser Trp Gln Gln Gly Arg Arg Asp Leu		
	325	330
Arg Phe Gln Pro Val Ser Ile Gly Arg Trp Gly Leu Gly Ser Arg Gln		
	340	345
Leu Cys Ser Phe Thr Ser Trp Arg Gly Gly Val Cys Cys Ser Tyr Gly		
	355	360
Pro Trp Gly Glu Phe Arg Glu Gly Trp His Val Gln Arg Pro Trp Gln		
	370	375
Leu Ala Gln Glu Leu Glu Pro Gln Ser Trp Cys Cys Arg Trp Asn Asp		
385	390	395
Lys Pro Tyr Leu Cys Ala Leu Tyr Gln Gln Arg Arg Pro His Val Gly		
	405	410
Cys Ala Thr Tyr Arg Pro Pro Gln Pro Ala Trp Met Phe Gly Asp Pro		
	420	425
His Ile Thr Thr Leu Asp Gly Val Ser Tyr Thr Phe Asn Gly Leu Gly		
	435	440
Asp Phe Leu Leu Val Gly Ala Gln Asp Gly Asn Ser Ser Phe Leu Leu		
	450	455
Gln Gly Arg Thr Ala Gln Thr Gly Ser Ala Gln Ala Thr Asn Phe Ile		
465	470	475
Ala Phe Ala Ala Gln Tyr Arg Ser Ser Ser Leu Gly Pro Val Thr Val		
	485	490
Gln Trp Leu Leu Glu Pro His Asp Ala Ile Arg Val Leu Leu Asp Asn		
	500	505
Gln Thr Val Thr Phe Gln Pro Asp His Glu Asp Gly Gly Gly Gln Glu		
	515	520
Thr Phe Asn Ala Thr Gly Val Leu Leu Ser Arg Asn Gly Ser Glu Val		
	530	535
Ser Ala Ser Phe Asp Gly Trp Ala Thr Val Ser Val Ile Ala Leu Ser		
545	550	555
Asn Ile Leu His Ala Ser Ala Ser Leu Pro Pro Glu Tyr Gln Asn Arg		
	560	

														565															570															575
Thr	Glu	Gly	Leu	Leu	Gly	Val	Trp	Asn	Asn	Asn	Pro	Glu	Asp	Asp	Phe																													
														580															585															590
Arg	Met	Pro	Asn	Gly	Ser	Thr	Ile	Pro	Pro	Gly	Ser	Pro	Glu	Glu	Met																													
														595															600															605
Leu	Phe	His	Phe	Gly	Met	Thr	Trp	Gln	Ile	Asn	Gly	Thr	Gly	Leu	Leu																													
														610															615															620
Gly	Lys	Arg	Asn	Asp	Gln	Leu	Pro	Ser	Asn	Phe	Thr	Pro	Val	Phe	Tyr																													
														625															630															635
Ser	Gln	Leu	Gln	Lys	Asn	Ser	Ser	Trp	Ala	Glu	His	Leu	Ile	Ser	Asn																													
														645															650															655
Cys	Asp	Gly	Asp	Ser	Ser	Cys	Ile	Tyr	Asp	Thr	Leu	Ala	Leu	Arg	Asn																													
														660															665															670
Ala	Ser	Ile	Gly	Leu	His	Thr	Arg	Glu	Val	Ser	Lys	Asn	Tyr	Glu	Gln																													
														675															680															685
Ala	Asn	Ala	Thr	Leu	Asn	Gln	Tyr	Pro	Pro	Ser	Ile	Asn	Gly	Gly	Arg																													
														690															695															700
Val	Ile	Glu	Ala	Tyr	Lys	Gly	Gln	Thr	Thr	Leu	Ile	Gln	Tyr	Thr	Ser																													
														705															710															715
Asn	Ala	Glu	Asp	Ala	Asn	Phe	Thr	Leu	Arg	Asp	Ser	Cys	Thr	Asp	Leu																													
														725															730															735
Glu	Leu	Phe	Glu	Asn	Gly	Thr	Leu	Leu	Trp	Thr	Pro	Lys	Ser	Leu	Glu																													
														740															745															750
Pro	Phe	Thr	Leu	Glu	Ile	Leu	Ala	Arg	Ser	Ala	Lys	Ile	Gly	Leu	Ala																													
														755															760															765
Ser	Ala	Leu	Gln	Pro	Arg	Thr	Val	Val	Cys	His	Cys	Asn	Ala	Glu	Ser																													
														770															775															780
Gln	Cys	Leu	Tyr	Asn	Gln	Thr	Ser	Arg	Val	Gly	Asn	Ser	Ser	Leu	Glu																													
														785															790															800
Val	Ala	Gly	Cys	Lys	Cys	Asp	Gly	Gly	Thr	Phe	Gly	Arg	Tyr	Cys	Glu																													
														805															810															815
Gly	Ser	Glu	Asp	Ala	Cys	Glu	Glu	Pro	Cys	Phe	Pro	Ser	Val	His	Cys																													
														820															825															830
Val	Pro	Gly	Lys	Gly	Cys	Glu	Ala	Cys	Pro	Pro	Asn	Leu	Thr	Gly	Asp																													
														835															840															845
Gly	Arg	His	Cys	Ala	Ala	Leu	Gly	Ser	Ser	Phe	Leu	Cys	Gln	Asn	Gln																													
														850															855															860
Ser	Cys	Pro	Val	Asn	Tyr	Cys	Tyr	Asn	Gln	Gly	His	Cys	Tyr	Ile	Ser																													
														865															870															880
Gln	Thr	Leu	Gly	Cys	Gln	Pro	Met	Cys	Thr	Cys	Pro	Pro	Ala	Phe	Thr																													
														885															890															895
Asp	Ser	Arg	Cys	Phe	Leu	Ala	Gly	Asn	Asn	Phe	Ser	Pro	Thr	Val	Asn																													
														900															905															910
Leu	Glu	Leu	Pro	Leu	Arg	Val	Ile	Gln	Leu	Leu	Leu	Ser	Glu	Glu	Glu																													
														915															920															925
Asn	Ala	Ser	Met	Ala	Glu	Val	Asn	Ala	Ser	Val	Ala	Tyr	Arg	Leu	Gly																													
														930															935															940
Thr	Leu	Asp	Met	Arg	Ala	Phe	Leu	Arg	Asn	Ser	Gln	Val	Glu	Arg	Ile																													
														945															950															955
Asp	Ser	Ala	Ala	Pro	Ala	Ser	Gly	Ser	Pro	Ile	Gln	His	Trp																															

```

          995                1000                1005
Pro Arg Arg Ser Glu Glu Pro Arg Asn Asp Val Val Phe Gln Pro Ile
 1010                1015                1020
Ser Gly Glu Asp Val Arg Asp Val Thr Ala Leu Asn Val Ser Thr Leu
1025                1030                1035                1040
Lys Ala Tyr Phe Arg Cys Asp Gly Tyr Lys Gly Tyr Asp Leu Val Tyr
          1045                1050                1055
Ser Pro Gln Ser Gly Phe Thr Cys Val Ser Pro Cys Ser Arg Gly Tyr
          1060                1065                1070
Cys Asp His Gly Gly Gln Cys Gln His Leu Pro Ser Gly Pro Arg Cys
          1075                1080                1085
Ser Cys Val Ser Phe Ser Ile Tyr Thr Ala Trp Gly Glu His Cys Glu
          1090                1095                1100
His Leu Ser Met Lys Leu Asp Ala Phe Phe Gly Ile Phe Phe Gly Ala
1105                1110                1115                1120
Leu Gly Gly Leu Leu Leu Leu Gly Val Gly Thr Phe Val Val Leu Arg
          1125                1130                1135
Phe Trp Gly Cys Ser Gly Ala Arg Phe Ser Tyr Phe Leu Asn Ser Ala
          1140                1145                1150
Glu Ala Leu Pro
          1155

```

&lt;210&gt; 1391

&lt;211&gt; 481

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1391

```

gtcgacggca tcgaggtcca tgacaaggca accgacctca accgcctgcg ccagaagatc
60
ggcattgtgt tccagcagtg gaacgccttc cgcacctca cgtgctgga aaacgtgatg
120
ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcggtccgg
180
caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcana gctttccggc
240
ggccagcaac agcgcattggc gattgcccgg gccctggcca tgtcgccgga ctacatgctg
300
ttcgacgaag ccacctcggc ccttgatccg cagttggtgg gcgaggtgct ggacaccatg
360
cgcatgctcg ccgaagacgg catgaccatg gtcctggtga cccatgaaat ccgctttgcc
420
cgcgatgtgt ccgatcgctt ggcgttcttt cgcaacggcc tgggtgcacga gatcggcgcg
480
c
481

```

&lt;210&gt; 1392

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1392

```

Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

```

```

      1           5           10           15
Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
      20           25           30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35           40           45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50           55           60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65           70           75           80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85           90           95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100          105          110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115          120          125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
      130          135          140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
      145          150          155          160

```

&lt;210&gt; 1393

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1393

```

cggccgcat cggcgcgggc cttgtgggat atggccatta ctgaggtgct ggccggctac
60
tacgaacccg acgaacacgg acaccgaag cccgagtcgt tgtacggcgc ggtcaagatg
120
tgggcccttc tgcgcgctca gggcatcagg tggcccgctg cancggtgga gcgcctcatg
180
cgggacaacc ggtggcgtgg ggtgacccgc cgtaagaagg ttncgcacca ccatcgctga
240
cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccaa
300
caagttgct
309

```

&lt;210&gt; 1394

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1394

```

Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
      1           5           10           15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
      20           25           30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
      35           40           45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
      50           55           60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

```

65

70

75

&lt;210&gt; 1395

&lt;211&gt; 347

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1395

accggtgggg ttcgtggtgg cctggttact ttttggcgcg agcgggtgtgg tgtgggccgt  
 60  
 tatgacggta gtcgtgggcg aaacgggtgct tgctggttg cgccgtcaac gtcgaagagc  
 120  
 ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt  
 180  
 gtcggtgggg gagatcccct cagttgcact agagcacgtg gccgatgacg tggaggtatt  
 240  
 ggctcaggct aggcgggctc atgcagtggg cggaagcggt tccgacgccc tcattgccac  
 300  
 ctcccgcaa ccagggatgg ctggtctggt gccactagcc cacgcgt  
 347

&lt;210&gt; 1396

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1396

Met	Thr	Val	Val	Val	Gly	Glu	Thr	Val	Leu	Val	Val	Val	Arg	Arg	Gln
1			5					10					15		
Arg	Arg	Arg	Ala	Gln	Ile	Leu	Lys	Gly	Arg	Asp	Val	Ala	Arg	Ala	
			20					25				30			
Thr	Arg	Ala	Leu	Ala	Gly	Arg	Val	Ser	Val	Gly	Glu	Ile	Pro	Ser	Val
			35				40					45			
Ala	Leu	Glu	His	Val	Ala	Asp	Asp	Val	Glu	Val	Leu	Ala	Gln	Ala	Arg
			50				55				60				
Arg	Ala	His	Ala	Val	Gly	Gly	Ser	Val	Ser	Asp	Ala	Leu	Ile	Ala	Thr
			65				70				75			80	
Ser	Arg	Gln	Pro	Gly	Met	Ala	Gly	Leu	Val	Pro	Leu	Ala	His	Ala	
				85				90					95		

&lt;210&gt; 1397

&lt;211&gt; 308

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1397

caattgcgcg ggttactgca ggcaagatg cagatgatgt cggacaccaa tttcctcgac  
 60  
 ctggcccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc  
 120  
 aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat  
 180  
 ggtcgactgt cctgcagcga cccggcgcttc gctgcccacc agatacaaag cctgctcaag  
 240

gcgttcgcct tttggccgca aatcaccctg ggccagccgg tgctggatgc cgccagccag  
300

gccaacgt

308

<210> 1398

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1398

Met	Gln	Met	Met	Ser	Asp	Thr	Asn	Phe	Leu	Asp	Leu	Ala	Arg	Val	Ala
1				5				10					15		
Ile	Ala	Ala	Thr	Ile	His	Ser	Pro	Glu	Arg	Ala	Gln	Asp	Met	Val	Asn
			20					25				30			
Arg	Leu	Ser	Lys	Arg	Glu	Glu	Gly	Phe	Thr	Gln	Trp	Val	Arg	Ala	Ala
	35						40				45				
Gln	Asp	Asp	Gly	Arg	Leu	Ser	Cys	Ser	Asp	Pro	Ala	Phe	Ala	Ala	His
50					55				60						
Gln	Ile	Gln	Ser	Leu	Leu	Lys	Ala	Phe	Ala	Phe	Trp	Pro	Gln	Ile	Thr
65				70				75					80		
Leu	Gly	Gln	Pro	Val	Leu	Asp	Ala	Ala	Ser	Gln	Ala	Asn			
				85				90							

<210> 1399

<211> 539

<212> DNA

<213> Homo sapiens

<400> 1399

gctagctaac atttattttt gtttttatta ttgttatcta gtggtaaaaa tttcttaagc  
60  
aatgaactga agtctagatt tttgagatgt agtcctttac tgattataaa gcaaatgcct  
120  
ttagatattt taacttcatt agtactatct gtagtaggag gctgatttta ctaaaattag  
180  
ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat  
240  
ctgagaatgc caggacattt cacgtggtat gaatgtagga tattcattta cacatcgctg  
300  
cacagacagc ctctatataa cccaccctgt tgggggtattg aattttttct tttcccgccc  
360  
tactttttaa tcttgatcat taatttcaac acataatttg tggcacttta gtttttttac  
420  
cctttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaac tacaatggg  
480  
aacaagaaa attgcttcac catctgtgaa cccctccttt ttagtcccc ttcacgcgt  
539

<210> 1400

<211> 90

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1400

```

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1           5           10           15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Ser Arg Pro Thr
      20           25           30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
      35           40           45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
      50           55           60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65           70           75           80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
      85           90

```

&lt;210&gt; 1401

&lt;211&gt; 653

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1401

```

ttcagggggt cacttgagct caagcttcgc gaagtcgggg acctcggacg accgattttt
60
cggctgtgca cgcgcaccgc aaggctggcg tgggttnnct catcaccggc gcggcgatgg
120
ncattgggggt ttgatggccg cgtttccttg ctgctgggcg cgatcctcat cgtcaccggc
180
ccaacgggtga ttaaccgat cctgcgtcag ttgcgtccta cccggcgagt gagggtcttg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctggcgcca tcctggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggaacag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct cttcgctggc cccatcgggt ggatcgtcac cgcgatgatg
420
aaacggcacc tcatcccgga ctctctacaa ggcgtagatt tcgttggggg cgcggttgga
480
acgtgtgttg gcgctaactg cattcgggag gaatcgggac tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgctcta ttcacatgc ttgcaggacg cgt
653

```

&lt;210&gt; 1402

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1           5           10           15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
      20           25           30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```



```

      35      40      45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
  50      55      60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
  65      70      75      80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
      85      90      95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
  100      105      110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
  115      120      125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
  130      135      140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
  145      150      155      160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
      165      170      175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
      180      185      190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
  195      200      205
Val Leu Phe Ile Met Leu Ala Gly Arg
  210      215

```

&lt;210&gt; 1403

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1403

```

aagctttgca gtttcttggt atccaaatcc aggcgttctt ggtctttttc cacaacagtg
  60
tgtgccacat gaaatggaac acgggcaaac atatctgata caggaaacat tagccaagta
  120
tgttccttgg ggtcatgata tccacaagtt gggcatatct cctttatcag ctgcttgcca
  180
gagcttcctt ccatctcttt cattatgacc tcaaaggag atggcacgct agtcttgga
  240
gtcctagctt gtttccgaag ggctgtcaga gcctccctgt taccatttct tatcttatca
  300
ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc
  360
agagcctctt gaagctgctt catgttgga tcc
  393

```

&lt;210&gt; 1404

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1404

```

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
  1      5      10      15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

<400> 1406															
Xaa	Arg	Leu	His	Lys	Ala	Leu	Gly	Ile	Glu	Leu	Pro	Gly	Ala	Leu	Gln
1				5					10					15	
Val	Ile	Val	Lys	Gly	Glu	Thr	Ser	Leu	Gln	Trp	Leu	Gly	Pro	Asp	Glu
			20					25					30		
Trp	Leu	Leu	Ile	Val	Pro	Ser	Gly	Glu	Glu	Phe	Ala	Ala	Glu	Gln	Asn
		35					40					45			
Leu	Arg	Ala	Ala	Leu	Gly	Glu	Leu	His	Ile	Gln	Val	Val	Asn	Val	Ser
	50					55				60					
Gly	Gly	Gln	Gln	Ile	Leu	Glu	Leu	Ser	Gly	Pro	Asn	Val	Arg	Asp	Val
65					70					75				80	
Leu	Met	Lys	Ser	Thr	Ser	Tyr	Asp	Val	His	Pro	Asn	Asn	Phe	Pro	Val

```
<210> 1408
<211> 335
<212> PRT
<213> Homo sapiens
```

&lt;400&gt; 1408

```

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1           5           10           15
Val Leu Glu Leu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
          20           25           30
Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
          35           40           45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
 50           55           60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
 65           70           75           80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
          85           90           95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
          100          105          110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
          115          120          125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
          130          135          140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
 145          150          155          160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
          165          170          175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
          180          185          190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
          195          200          205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
          210          215          220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
 225          230          235          240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
          245          250          255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
          260          265          270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
          275          280          285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
          290          295          300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
 305          310          315          320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
          325          330          335

```

&lt;210&gt; 1409

&lt;211&gt; 279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1409

```

nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
60
gcacgagata gcaccatgca actgatcgat atcggcgtca acctgaccaa cagcagtttc
120

```

cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg ccggcggttac gcaaagtctg  
 180  
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat  
 240  
 gcaagcggcg cccacctgtt cgccacggcc ggcgtgcac  
 279

<210> 1410  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1410  
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala  
 1 5 10 15  
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly  
 20 25 30  
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val  
 35 40 45  
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr  
 50 55 60  
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp  
 65 70 75 80  
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His  
 85 90

<210> 1411  
 <211> 321  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gattttcaat ctatttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg  
 180  
 ttagacgaag tcgatcctga attgttacgt acttatgaaa aactgggcat tcctctcata  
 240  
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcgtt  
 300  
 actacttttc gtcaaaagct t  
 321

<210> 1412  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 1412  
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp  
 1 5 10 15  
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

```

      20      25      30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
      35      40      45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
      50      55      60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
65      70      75      80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
      85      90      95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
      100      105

```

&lt;210&gt; 1413

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1413

```

atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgatcct gatcgaagac
60
ggcgaaatcg gcctcgacct gatcatcgac ctgccacgtc cgcgtgcccg tgggtcacac
120
cgcttgcccg cggttgaagc cgaagtata aaccgtgtgc tgcataacc cngcacgaag
180
ccggaacccg aacatgttaa accgctgcct acgaaattgc gttggggtca ataactcata
240
gaggaacacc atcatgacta taaaagccat caacgtgcgt aaccagttaa aaggcaccat
300
caaggaaatc gtagtcggca acgtgctctc ggaaatcgac gtgcagaccg cctccgggat
360
cgtcacttct gtgatcacta cgcgt
385

```

&lt;210&gt; 1414

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1414

```

Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
1      5      10      15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
      20      25      30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
      35      40      45
Val Ile Asn Arg Val Leu Ser
50      55

```

&lt;210&gt; 1415

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1415

acgcgtgcag gcaaacatta atatgagtta acaccacaca ggatgagact gtttgtacct  
 60  
 gtaactgtcc ttgtcatctg tcttgcatgat ttagaagagg aatcagaaaag ctgggacaac  
 120  
 tctgaggctg aagaggagga gaaagcccct gtgttgccag agagtacaga agggcgggag  
 180  
 ctgaccacagg gcccggcaga gtcctcctct ctctcaggct gtgggagctg gcagccccgg  
 240  
 aagctgccag tcttcaagtc cctccggcac atgaggcagg tcttgggtgc cccttctttc  
 300  
 cgcattgtgg cctggcacgt tctcatgggg aaccagggtga tctggaaaag cagagacgtg  
 360  
 gacctcgtcc agtcagcttt tgaagtactt cgggtgagaa catcttttcc ttaggtgtgc  
 420

<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

Met	Arg	Leu	Phe	Val	Pro	Val	Thr	Val	Leu	Val	Ile	Cys	Leu	Ala	Asp
1				5					10					15	
Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
			20					25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
	35						40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
	50					55					60				
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65					70					75				80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
				85					90					95	
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
		100						105					110		
Phe	Glu	Val	Leu	Arg	Val	Arg	Thr	Ser	Phe	Pro					
		115					120								

<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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 120  
 taggagggtg gcccaacct ttccagtgtg acctgttccc attcccccat gtctcctccc  
 180  
 atccctcccg ccactcagct caggctgatg agaagcagag caacgggtgt atcgtgtgtt  
 240  
 tctttcctgg tgggtagtg ggggtgggct gaggagagaa aagggtgatt agcgtggggc  
 300

cccgccctct tttgtcctct tcccagggtc cctggccctc tcggagaaac gcacttggtt  
360  
cgggccagcc gcctgagggg acggggtcac gtctgtcctt cacactgcag ctgctgggac  
420  
gtggagcttc ccaggggagc cagggggact tttgccgcag ccatgaaggg ggcacgctgg  
480  
aggagggtcc cctgggtgtc cctgagctgc ctgtgtctct gcctccttc gcatgtggtc  
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720  
aaagctcaaa ccgacaccct cagcgagatg atgacatcaa ctcttttttc ttccccaagt  
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gtacacaatg tgatggagac tgttacgcag gagacagctc ctccagatga aatgaccaca  
840  
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960  
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1080  
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1140  
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1260  
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1320  
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1380  
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1440  
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1560  
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1920



ctacatgaaa caacaacatg gccttctctca ttctccagca aaggccacac aacttgggtca  
1980  
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5058

&lt;210&gt; 1418

&lt;211&gt; 1532

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1418

```

Met Lys Gly Ala Arg Trp Arg Arg Val Pro Trp Val Ser Leu Ser Cys
 1              5              10              15
Leu Cys Leu Cys Leu Leu Pro His Val Val Pro Gly Thr Thr Glu Asp
      20              25              30
Thr Leu Ile Thr Gly Ser Lys Thr Pro Ala Pro Val Thr Ser Thr Gly
      35              40              45
Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
      50              55              60
Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
65              70              75              80
Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
      85              90              95
Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
      100             105             110
Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
      115             120             125
Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
      130             135             140
Met Thr Thr Ser Thr Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
145             150             155             160
Thr Ala Gly Thr Glu Ser Ser Thr Pro Val Thr Ser Ala Val Ser Ile
      165             170             175
Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
      180             185             190
Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
      195             200             205
Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
      210             215             220
Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
225             230             235             240
Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
      245             250             255
Ser Val Thr Asn Thr Ser Met Met Thr Ser Glu Lys Ile Thr Val Thr
      260             265             270
Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
      275             280             285
Pro Val Thr Gly Ser Leu Met Pro Val Thr Ser Ala Ala Leu Val Thr
      290             295             300
Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
305             310             315             320
Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
      325             330             335
Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
      340             345             350
Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
      355             360             365
Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
      370             375             380
Pro Ser Ser Val Ser Asn Thr Phe Leu Val Thr Ser Lys Val Phe Arg

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385          390          395          400
Met Pro Ile Ser Arg Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
          405          410          415
Leu Ser Val Ser Gly Thr Ile Ser Ala Ile Thr Ser Lys Val Ser Thr
          420          425          430
Ile Trp Trp Ser Asp Thr Leu Ser Thr Ala Leu Ser Pro Ser Ser Leu
          435          440          445
Pro Pro Lys Ile Ser Thr Ala Phe His Thr Gln Gln Ser Glu Gly Ala
          450          455          460
Glu Thr Thr Gly Arg Pro His Glu Arg Ser Ser Phe Ser Pro Gly Val
465          470          475          480
Ser Gln Glu Ile Phe Thr Leu His Glu Thr Thr Trp Pro Ser Ser
          485          490          495
Phe Ser Ser Lys Gly His Thr Thr Trp Ser Gln Thr Glu Leu Pro Ser
          500          505          510
Thr Ser Thr Gly Ala Ala Thr Arg Leu Val Thr Gly Asn Pro Ser Thr
          515          520          525
Gly Ala Ala Gly Thr Ile Pro Arg Val Pro Ser Lys Val Ser Ala Ile
          530          535          540
Gly Glu Pro Gly Glu Pro Thr Thr Tyr Ser Ser His Ser Thr Thr Leu
545          550          555          560
Pro Lys Thr Thr Gly Ala Gly Ala Gln Thr Gln Trp Thr Gln Glu Thr
          565          570          575
Gly Thr Thr Gly Glu Ala Leu Leu Ser Ser Pro Ser Tyr Ser Val Thr
          580          585          590
Gln Met Ile Lys Thr Ala Thr Ser Pro Ser Ser Ser Pro Met Leu Asp
          595          600          605
Arg His Thr Ser Gln Gln Ile Thr Thr Ala Pro Ser Thr Asn His Ser
          610          615          620
Thr Ile His Ser Thr Ser Thr Ser Pro Gln Glu Ser Pro Ala Val Ser
625          630          635          640
Gln Arg Gly His Thr Gln Ala Pro Gln Thr Thr Gln Glu Ser Gln Thr
          645          650          655
Thr Arg Ser Val Ser Pro Met Thr Asp Thr Lys Thr Val Thr Thr Pro
          660          665          670
Gly Ser Ser Phe Thr Ala Ser Gly His Ser Pro Ser Glu Ile Val Pro
          675          680          685
Gln Asp Ala Pro Thr Ile Ser Ala Ala Thr Thr Phe Ala Pro Ala Pro
          690          695          700
Thr Gly Asp Gly His Thr Thr Gln Ala Pro Thr Thr Ala Leu Gln Ala
705          710          715          720
Thr Pro Ser Ser His Asp Ala Thr Leu Gly Pro Ser Gly Gly Thr Ser
          725          730          735
Leu Ser Lys Thr Gly Ala Leu Thr Leu Ala Asn Ser Val Val Ser Thr
          740          745          750
Pro Gly Gly Pro Glu Gly Gln Trp Thr Ser Ala Ser Ala Ser Thr Ser
          755          760          765
Pro Asp Thr Ala Ala Ala Met Thr His Thr His Gln Ala Glu Ser Thr
          770          775          780
Glu Ala Ser Gly Gln Thr Gln Thr Ser Glu Pro Ala Ser Ser Gly Ser
785          790          795          800
Arg Thr Thr Ser Ala Gly Thr Ala Thr Pro Ser Ser Ser Gly Ala Ser
          805          810          815
Gly Thr Thr Pro Ser Gly Ser Glu Gly Ile Ser Thr Ser Gly Glu Thr

```

1203

1250	1255	1260
Gly His Ala Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
1265	1270	1275
Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1280
	1285	1290
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1295
	1300	1305
Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr		1310
	1315	1320
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1325
	1330	1335
Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		1340
1345	1350	1355
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1360
	1365	1370
Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
	1380	1385
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1390
	1395	1400
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
	1410	1415
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1420
1425	1430	1435
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr		1440
	1445	1450
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1455
	1460	1465
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1470
	1475	1480
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
	1490	1495
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1500
1505	1510	1515
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser		1520
	1525	1530

&lt;210&gt; 1419

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1419

aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct  
60

gaggttcctt tgatggaaat caagtattgt actggtaaatt ttattcagga cagtggctctg  
120

gattatatca tcatccgttt gtgtgggtttc atgcagggtc ttattgggca atatgctgtt  
180

cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg  
240

gatacccagg acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag  
300

aaactcatg

309

<210> 1420  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1420  
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys  
 1 5 10 15  
 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly  
 20 25 30  
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys  
 35 40 45  
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu  
 50 55 60  
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met  
 65 70 75 80  
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu  
 85 90 95  
 Lys Ala Asn Lys Lys Leu Met  
 100

<210> 1421  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 1421  
 ccatggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca  
 60  
 ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag  
 120  
 gatgttagag caaagccgag cccagctgct ggcgaatgca tctgtgatgc ccatgagcag  
 180  
 ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagtg  
 240  
 ccctcagagc cctgattttt cacaaaccga ctctccaag cctccctgt gggcgggata  
 300  
 cacaagccag agtcgccttg tcacatctct tctctctcca ccaggtcatg ggcaaactt  
 360  
 cctgacatac tttacgacat tacag  
 385

<210> 1422  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1422  
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg  
 1 5 10 15  
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu  
 20 25 30  
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

          35          40          45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
   50          55          60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
65          70          75          80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
          85          90          95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
          100          105          110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
          115          120          125

```

&lt;210&gt; 1423

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1423

```

nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
60
ctctatatttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
120
tgtgtcaccc tgattgatct ggagcttcac aatcctaaag caatagcagt agatccaata
180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtgagag atgtgacatg
240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
300
ctagacctag tcaacaaatt ggtttactgg gtagat
336

```

&lt;210&gt; 1424

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1424

```

Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
  1          5          10          15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
          20          25          30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
          35          40          45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
          50          55          60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
65          70          75          80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
          85          90          95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
          100          105          110

```

&lt;210&gt; 1425

&lt;211&gt; 672



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1425

```

accggtgttt tcgatacact gggcgggttg agtgactatc gcagtcagat cggcccgatg
60
gcccgcatg tcgaagacct ggccttggcg ctacaggtca ttgccggtga agatggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaaggggttg
180
cgagtcgcct ggtacagcga tggtagcatt gagcccggtg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgcct tgatccgccg ggccttcccc
300
tcggcggtga gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgagct cgatccagct gttttcagat tgggacagc tccgtacagc catgctgggg
420
ttcatggccg actacgacat taccctgtgc cctgtcgatg ccgcgcgggc gacccaactg
480
ggagagacgc ggccagggtt gttcagttcc ccccttccta atggcttggc gggttggcct
540
tgtgtggtgg tccgggcccgg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgtagcggtg gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

```

&lt;210&gt; 1426

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1426

```

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
1      5      10      15
Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Leu Gln
20     25     30
Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
35     40     45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
50     55     60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
65     70     75     80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
85     90     95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
100    105    110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
115    120    125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
130    135    140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

```

145          150          155          160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
          165          170          175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
          180          185          190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
          195          200          205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
          210          215          220

```

&lt;210&gt; 1427

&lt;211&gt; 270

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1427

```

atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgcttcgctc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttggctagc
270

```

&lt;210&gt; 1428

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1428

```

Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
          20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
          35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
          50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
          85          90

```

&lt;210&gt; 1429

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1429

```

ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

```

catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg  
120  
gcggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgcggtg  
180  
atcgccctcg acatgggcgt cgcagtgtcg acggtcaacc tgggtggcagg cgcggccttg  
240  
ctgggggttg ccaccgggtt ggcgttttta ttgcccatgg gcgaccgctt tgaccggcgc  
300  
aagctggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg  
360  
ccgaggatct gggcggtgat cggc  
384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met	Thr	Ser	Glu	Asn	Ala	Pro	Pro	Arg	Gly	Lys	Ile	Ile	Met	Met	Ala
1				5					10					15	
Val	Ile	Ala	Gly	Ala	Val	Val	Thr	Asn	Ile	Tyr	Cys	Thr	Gln	Pro	Val
		20						25					30		
Leu	Pro	Leu	Ile	Ala	Ser	Asp	Met	Gly	Val	Ala	Val	Ser	Thr	Val	Asn
		35					40					45			
Leu	Val	Ala	Gly	Ala	Ala	Leu	Leu	Gly	Phe	Ala	Thr	Gly	Leu	Ala	Phe
	50					55				60					
Leu	Leu	Pro	Met	Gly	Asp	Arg	Phe	Asp	Arg	Arg	Lys	Leu	Val	Leu	Gly
65				70				75						80	
Gln	Ile	Ala	Leu	Ala	Phe	Cys	Phe	Ala	Leu	Ala	Ala	Ala	Phe	Ala	Pro
			85					90						95	
Arg	Ile	Trp	Ala	Leu	Ile	Gly									
						100									

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

aagcttcagg gcaggtgtcc cctgaagtca agcctgattc tgcacatct tgtatagcac  
60  
aaactggcga cacctgtgac tttgcctttc ccagggtccc tgcctccgc tccaggtagg  
120  
ctcagcctga gggaggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac  
180  
tccttcagct tgtcttggga gagctgtggg ctgcatccc ctggctcctc gtcccacagg  
240  
cagccccgct gtgtgtctgg tcttgaggt tggctgcagc ttctgggccc tgcttcacg  
300  
ccctctccc atgacctcc agccttgga ggtgtaatag ttcccatgt tgcctgctt  
360  
tagtttgct ccctctcctt ggctgttctt tctgctgttc cactctctgt gcac  
414

<210> 1432  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1432  
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly,  
 1 5 10 15  
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His  
 20 25 30  
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr  
 35 40 45  
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys  
 50 55 60  
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser  
 65 70 75 80  
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe  
 85 90 95  
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala  
 100 105

<210> 1433  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1433  
 aaattttcga tggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg  
 60  
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt  
 120  
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc  
 180  
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg  
 240  
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcgat gcaa  
 294

<210> 1434  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1434  
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp  
 1 5 10 15  
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe  
 20 25 30  
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His  
 35 40 45  
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys  
 50 55 60  
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80									
Leu	Val	Asn	Glu	Ala	Ser	Gln	Asp	Lys	Ala	Glu	Ser	His	Val	Arg	Ala
				85					90					95	
Met	Gln														

<210> 1435  
 <211> 1772  
 <212> DNA  
 <213> Homo sapiens

<400> 1435  
 ntttctggct tatgtggttt ccccggtgtg gaggtgggat ccactccccg catagtctct  
 60  
 cgtggcgatg ggacacctgg aaagtgtgt gatgtctttg aatgtgttaa tgatacaaag  
 120  
 ccagcctgcg tattaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac  
 180  
 tgtcggttct gtcgatgcc aagggggcgtt gccatctgct tcaactgcca gtgtggtgag  
 240  
 ataaactgcg agaggtacta cgtgccccgaa ggagagtgtg gccagtggtg tgaaatccag  
 300  
 tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac  
 360  
 cggtgggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccaactgcgtt  
 420  
 gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgccctgggga gtgttgccct  
 480  
 gtgtgcgaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac  
 540  
 tgcactctga cagggaagga ctgcattaat ggtttcaaac gcgatcaciaa tgggtgtcgg  
 600  
 acctgtcagt gcataaacac cgaggaacta tgttcagaac gtaaacaagg ctgcacctg  
 660  
 aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgccca  
 720  
 aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag  
 780  
 aataagcagc gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag  
 840  
 natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga  
 900  
 ggctctgct tcagctgggc caccatcct gtcgggcaact tgtctcaccg tggatggtca  
 960  
 tcatcataaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg  
 1020  
 acgggaaatg tgtgccctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca  
 1080  
 cctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag  
 1140  
 tactccnct ccatttgcca cgccccgga ggagaatact ttgtggaagg agaaacgtgg  
 1200  
 aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag  
 1260

gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag  
 1320  
 tgtacagatc aaccttttcg gccttccttg tcccgaata acagcgtacc taattactgc  
 1380  
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc  
 1440  
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgcc ttctgtatcc  
 1500  
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgccct actgcataga agacacaatt  
 1560  
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac  
 1620  
 cttgacagct gcaccactg ctactgectg cagggccaga cttctgctc gaccgtcagc  
 1680  
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt  
 1740  
 ccagaaatgt atgtcccagt cccttcacgc gt  
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55					60				
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75				80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85					90						95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
			100					105						110	
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
	115						120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
	130					135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155				160	
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
			165					170						175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
		180						185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
	195					200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

```

225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

<210> 1437  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1437
cggggaactgt gctcgccac catccggtga cgggtgtcgg gcagtggcaa ctcaacaccc
60
agggcatgac cggagccatc ccgagcagca ggtgcacggc ccgggccggt gactcgtgga
120
cccgtaccct catgacctcg atgcaacttc cacggtggtc caccgatcac atcgaccgct
180
cgggtccatgt cgatgctgag cagttcgacc ggttgccgag cgagttcctg tcccgtgggc
240
acagttcttg ccctgccgca catgggggtcc tgggacttgg ccggggcctg ggtggccaga
300
cgcggttctt ccccgagttc cgtcgcggag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1438
Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
          20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
          35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
          50          55          60

```

<210> 1439  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

<400> 1439  
 accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc  
 60  
 tgcttctttc cacaatgtag acttaaaaaa atgccgtaa acattttacc atatgattga  
 120  
 gtcagggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcatg ggtggggagt  
 180  
 cgcggaaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt  
 240  
 ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc  
 300  
 agtgggttaa caagacgacg gggaaacttca gagtgcaggc agtcctcatc ttggcagat  
 360  
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaa atcaatacag  
 420  
 cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c  
 471

<210> 1440  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1440  
 Met Gly Gly Glu Ser Arg Lys Tyr Thr Gly Gln Ala Val Arg Tyr His  
 1 5 10 15  
 Asp Val Leu Ser His Phe Cys Leu Trp Ser Val Phe Leu Gly Asn Val  
 20 25 30  
 Thr Trp Arg Pro Arg Gly Ser Ala Ile Ser Cys Val Gln Trp Val Asn  
 35 40 45  
 Lys Thr Thr Gly Asn Phe Arg Val Gln Ala Val Leu Ile Phe Gly Arg  
 50 55 60  
 Phe Cys Ile Cys Thr Phe Thr His Ser Leu Lys Cys Ile Cys Asn Pro  
 65 70 75 80  
 Lys Ile Asn Thr Ala Val Ser Gln Ser Phe Ser Asp Thr Gly Arg Gly  
 85 90 95  
 Val Lys Ile Leu Ser  
 100

<210> 1441  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 1441  
 nnnagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg  
 60  
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc  
 120  
 accgcagctc acactcaccg cacggcagct cactctcacc gcacggcagc tcacactcac  
 180  
 cacacagcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac  
 240



tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg caccgcagct  
 300  
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctactctca ccacacggca  
 360  
 cctcactctc acgcgt  
 376

<210> 1442  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1442  
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His  
 1 5 10 15  
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His  
 20 25 30  
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr  
 35 40 45  
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala  
 50 55 60  
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His  
 65 70 75 80  
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His  
 85 90 95  
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr  
 100 105 110  
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala  
 115 120 125

<210> 1443  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

<400> 1443  
 atggcagccc tgcgtcccaa ggagctgcc caactaatgg tcgccatcgg caatgcgagc  
 60  
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg  
 120  
 gaagccgcta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca  
 180  
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc  
 240  
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt  
 286

<210> 1444  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1444  
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1           5           10           15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20           25           30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35           40           45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50           55           60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65           70           75           80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85           90           95

```

&lt;210&gt; 1445

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1445

```

naccggttca ccggggaggc ctctgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgctgttccg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt gggtcttttcg agccgggtca
180
gaggtttatg agctggcctt cccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
aggggtggacc ccgacaacac cgctcgacaag ctgccaacac tcggcgagcg cctg
294

```

&lt;210&gt; 1446

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1446

```

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1           5           10           15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20           25           30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35           40           45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50           55           60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65           70           75           80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85           90           95
Arg Leu

```

&lt;210&gt; 1447

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1447

nnncagaacc agaagatcaa cctgcatgac ggctcggttct ccgacgttgg cggcatgggtg  
 60  
 ggtaatatct ccattgcccc ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac  
 120  
 gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc  
 180  
 ctctacgggg ctggcgggtgc cgaccaggtt tgggttggtt cgggcaacaa taccttcgtg  
 240  
 ttccgcccgcg tttccgactc ggcgcgcaaa gcggccgacc ggatcatgga cttcaccagt  
 300  
 ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac  
 360  
 gcg  
 363

&lt;210&gt; 1448

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1448

Xaa	Gln	Asn	Gln	Lys	Ile	Asn	Leu	His	Asp	Gly	Ser	Phe	Ser	Asp	Val
1				5					10					15	
Gly	Gly	Met	Val	Gly	Asn	Ile	Ser	Ile	Ala	Gln	Gly	Val	Thr	Ile	Glu
			20					25					30		
Asn	Ala	Val	Gly	Gly	Ser	Gly	Asn	Asp	Leu	Leu	Ile	Gly	Asn	Asp	Ala
			35				40					45			
Ala	Asn	Glu	Leu	Arg	Gly	Gly	Ala	Gly	Asn	Asp	Ile	Leu	Tyr	Gly	Ala
			50				55				60				
Gly	Gly	Ala	Asp	Gln	Val	Trp	Val	Gly	Ser	Gly	Asn	Asn	Thr	Phe	Val
65				70					75					80	
Phe	Ala	Ala	Val	Ser	Asp	Ser	Ala	Pro	Lys	Ala	Ala	Asp	Arg	Ile	Met
			85						90				95		
Asp	Phe	Thr	Ser	Gly	Gln	Asp	Lys	Ile	Asp	Leu	Ser	Gly	Ile	Thr	His
			100				105						110		
Gly	Ser	Gly	Leu	Thr	Phe	Val	Asn	Ala							
			115				120								

&lt;210&gt; 1449

&lt;211&gt; 541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1449

aggcgctacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat  
 60  
 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg  
 120  
 ggaatgtacg tgtcaggagg agggaggggtg cctacaaccc tttggtactg gcgtttgtga  
 180  
 ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg  
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg  
 300  
 aactcagtgc attgcgcacg cttgggcggc gtttttctga acgcaatccc gccctggcac  
 360  
 cctttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtctttgcc  
 420  
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgaggtt gacccattca  
 480  
 ttgatgcact tgggtgtggcc caattacatg cggccattgc cggccttcag tattttgcag  
 540  
 t  
 541

<210> 1450

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1450

Met	Arg	Leu	Ser	Leu	His	Glu	Ser	Leu	Ser	Gln	Ser	Arg	Leu	Ala	Ile
1				5					10					15	
Glu	Arg	Phe	Ile	Gln	Ala	Tyr	Glu	Pro	Arg	Leu	Gly	Asn	Val	Arg	Val
		20						25				30			
Arg	Arg	Arg	Glu	Gly	Ala	Tyr	Asn	Pro	Leu	Val	Leu	Ala	Phe	Val	Ile
		35					40					45			
Glu	Ala	Thr	Val	Val	Ile	Asp	Gly	Val	Ile	Gln	Pro	Val	Val	Phe	Asn
	50					55				60					
Ala	His	Leu	Val	Gly	Gly	Gly	Thr	Gly	Arg	Val	Cys	Tyr	Leu	Met	Phe
65					70				75					80	
Phe	Glu	Leu	Phe	Tyr	Gln	Ser	Glu	Leu	Ser	Ala	Leu	Arg	Thr	Leu	Gly
			85						90				95		
Arg	Arg	Phe	Ser	Glu	Arg	Asn	Pro	Ala	Leu	Ala	Pro	Phe	Leu	Ala	Asp
		100					105						110		
Ser	Arg	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Ser	Ile	Glu	Ser	Leu	Cys	Leu
		115				120					125				
Ser	Pro	Arg	Ala	Pro	Ala	Pro	Glu	Ala	Cys						
		130				135									

<210> 1451

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1451

aggcctctgg cgagttgatc tacagcttcg gaccgggtgc tatggctact ggcgtcaagt  
 60  
 acacgaacac agtttgact cctgtgggcg actacgaggt ggtgctgacg gattcttggg  
 120  
 gtgatggctg gaaccgggt tcttacctga acatgtacga cagctcggac aacttgatcc  
 180  
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct  
 240  
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg  
 300

tggacaagga gtggaactct gtggac  
326

<210> 1452

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1452

```

Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
 1             5             10             15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
      20             25             30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
      35             40             45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
      50             55             60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65             70             75             80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
      85             90             95

```

<210> 1453

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1453

```

cggccgcgcg gccccacgtg caccgcgtgc atggtccctc gaggacgcgc atctgcagcc
60
cccgctcccc gcaaacctcc aggccggaga gtcctggcca aggccgctgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactcgcct atagaaatgt gcaaaccacc cgtgcgcaca ggccccctcca cccatgcagg
300
cgtgtgcaca tcaccacac ggacac
326

```

<210> 1454

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1454

```

Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
 1             5             10             15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
      20             25             30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
      35             40             45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

```

```

      50              55              60
Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
65              70              75              80
Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
      85              90              95
Thr Asp

```

<210> 1455  
 <211> 314  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1455
gatccagtca aaaaagcatg tgggggttgct cacgctgggt ggaaaggtag tttgttgggt
60
gttgctatgg ctacagtga tgcctatgata gcagaatatg gctgccgttt ggaaaaactt
120
tggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
180
gaggcatttc ataattctca tcctgcatgt gtacaactat ttgattcacc aaatccctgt
240
atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
300
ccttccaaac tgac
314

```

<210> 1456  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
1      5      10      15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
      20      25      30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
      35      40      45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
      50      55      60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65      70      75      80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
      85      90      95
Cys Phe Leu Pro Pro Ser Lys Leu
      100

```

<210> 1457  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta  
 60  
 gcacatgcat tgctaaaatc ggcgcccaga accttctctg cccctctccc atgggatgca  
 120  
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct cccagggaaa  
 180  
 aggtccccct ggcceaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg  
 240  
 gtgggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc  
 300  
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac  
 360  
 aactccagcc cacaaccaag tcactgggct gcctaccac tgcccaagt cctcaagtca  
 420  
 acacattcct gcactgn  
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5					10					15	
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
			20					25					30		
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
			35				40					45			
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55				60					
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65					70					75				80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Ala	Tyr	Pro	Leu	Pro	Lys
				85					90					95	
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
			100					105							

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagagggtca ccggccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgacccg  
 60  
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc  
 120  
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg  
 180  
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc  
 240  
 gccactgcgg tgctcagcat gccctccac tccccgatcg ccatgagctg gcgan  
 295

<210> 1460  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 1460  
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg  
 1 5 10 15  
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg  
 20 25 30  
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu  
 35 40 45  
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg  
 50 55 60

<210> 1461  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 1461  
 nnaagcttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg  
 60  
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca  
 120  
 gaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcatc atccccgtgaa  
 180  
 gaagcacaaa ttcgcggtga agcgcttaac ctaacgcctt atgatgcgat gcttgataag  
 240  
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaaggc aaagacgtgg  
 300  
 ttacctacgt taattgaaaa agcgcttagaa aagcagcaat cagaatctat cattatgcca  
 360  
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta  
 420  
 aaattcgact tt  
 432

<210> 1462  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 1462  
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val  
 1 5 10 15  
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu  
 20 25 30  
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu  
 35 40 45  
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile  
 50 55 60  
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys



```

65          70          75          80
Phe Glu Pro Gly Thr Thr Thr Val Ser Leu Asn Thr Leu Phe Ser Lys
          85          90          95
Val Lys Thr Trp Leu Pro Thr Leu Ile Glu Lys Ala Leu Glu Lys Gln
          100          105          110
Gln Ser Glu Ser Ile Ile Met Pro Ser Gly Thr Phe Ser Thr Ala Asn
          115          120          125
Gln Lys Ala Leu Gly Leu Glu Ile Met Lys Leu Leu Lys Phe Asp Phe
          130          135          140

```

&lt;210&gt; 1463

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1463

```

naccggttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaagtca tggggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtag atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

```

&lt;210&gt; 1464

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1464

```

Xaa Ala Phe Gln Ser Lys Leu Asp Leu Thr Ala Phe Glu Phe Phe Ser
1          5          10          15
Asp Lys Ala Leu Ala Lys Val Met Gly Arg Gly Asp Val Pro Ala Pro
20          25          30
Phe Glu Thr Glu Cys Pro Phe Tyr Ala Leu Leu Glu Phe Glu Ala Thr
35          40          45
Thr Glu Glu Val Ala Asn His Ala Leu Glu Thr Phe Glu His Cys Val
50          55          60
Glu Gln Gly Trp Val Leu Asp Gly Val Met Ser Gln Ser Glu Thr Gln
65          70          75          80
Leu His Asn Leu Trp Lys Leu Arg Glu Tyr Ile Ser Glu Thr Ile Ser
85          90          95
His Trp Thr Pro Tyr Lys Asn Asp Ile Ser Val Thr Val Ser Lys Val
100          105          110
Pro Ala Phe Leu Lys Glu Ile Asp Ala Ile Val Val Ser Ile Thr Arg

```

	115		120		125
Thr	Ser	Lys	Leu	Leu	Val
			Gly	His	Ile
				Gly	Asp
					Ala
	130		135		140

<210> 1465  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<400> 1465  
 gtgcacgggtc tttgagctgc aattcccagg aatcaggggc cataggcggg agatggcatg  
 60  
 cagcctctcg ggcgggaaaag tgggtctacag tgcttgcctt cccgggcagg cagctcgtag  
 120  
 gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca  
 180  
 caacctcacc gaattcaaac tccgggtggat ttcccacgcc gagcagtgga aggcggaaaa  
 240  
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg  
 300  
 gaccttgccc acggaagttt tcggtcaagc acccgaattc gacttcccat atatgaaact  
 360  
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt  
 420  
 cacg  
 424

<210> 1466  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1466  
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu  
 1 5 10 15  
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro  
 20 25 30  
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe  
 35 40 45  
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg  
 50 55 60  
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly  
 65 70 75 80  
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe  
 85 90 95  
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe  
 100 105 110  
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr  
 115 120

<210> 1467  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1467

nacgcgtgac ggcgaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg  
 60  
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa  
 120  
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt  
 180  
 cgtacgtatg cgctgtgtct gatggatcatg acaacgtgga atgccacgat cctaggcccc  
 240  
 gccaaactcgg tgcattgagaa ccgcatatac tgcctgcgcc tcgtgtgtgg cgactcgtac  
 300  
 cctcttctgc cgcttgagat ttggttccag acgcgcatca acttgccgtg cgtcgtatgcc  
 360  
 cacacggggc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac  
 420  
 actatggaaa gctgctgcat g  
 441

&lt;210&gt; 1468

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5				10					15		
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
		20						25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
		35						40					45		
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
		50				55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65					70					75				80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
				85					90					95	
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
			100					105					110		
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115						120							

&lt;210&gt; 1469

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg  
 60  
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt  
 120  
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt  
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttgggc catttggcgc tggattactt  
 240  
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg  
 300  
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttgggtg cgtaatcgca  
 360  
 gggtcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact  
 420  
 cctctcggtta caggaatcgt cgttctgttg attggtctac cattaatg  
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1				5					10					15	
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
		20						25					30		
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
	35						40					45			
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
	50					55					60				
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65					70				75					80	
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
			85					90					95		
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
	100						105					110			
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
	115					120					125				
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
	130					135					140				
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145					150					155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

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 60  
 gttatcgatc agccgctgac gattttgcac accaatctgg cgggtgtatat cggcattgtg  
 120  
 tacgcttata tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac  
 180  
 tcgctgggtg aggcctcact ggatctcggg gcccgctccgc tgaaaacggt tttcaatgtg  
 240  
 attgtcccgc tcaccaaagg cggcattata gcgggggcga tgetgggtgt tatccccgcg  
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcggcggcc g  
341

<210> 1472

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1472

Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu  
1 5 10 15  
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn  
20 25 30  
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val  
35 40 45  
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu  
50 55 60  
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val  
65 70 75 80  
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val  
85 90 95  
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly  
100 105 110  
Gly

<210> 1473

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1473

tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa  
60  
gaaactgacg gaaatgttca aactccagtt tggtgttaag cagatcacta aacttaaaat  
120  
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg  
180  
ataaaatgcc agttccaatt tcacaagtgg tgctctcagc tttcttgga aatgtctctt  
240  
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttccacca  
300  
gtccacctt tttataagca atttggtccg attttacat ctttgtccat gg  
352

<210> 1474

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1474

Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu  
1 5 10 15  
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

```

                20                25                30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
                35                40                45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
                50                55                60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
65                70                75                80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
                85                90                95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
                100                105                110
Arg

```

<210> 1475  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

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<400> 1475
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60
gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
120
ctgggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtccaggtc attatcaaag accgcattga agtccgtttg cggcgggcga cccggcgcca
240
tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtatatt tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtggtgtc
389

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<210> 1476  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

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<400> 1476
Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
1                5                10                15
Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
                20                25                30
Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
                35                40                45
Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
50                55                60
Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
65                70                75                80
Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
                85                90                95
Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

```

100 105 110  
 Asp Asn Arg Ser Leu Thr Gly Trp Cys  
 115 120

<210> 1477  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1477  
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 60  
 ttccctccctt atttgctggg ccaaaccggac ggccaacctt aagatgcccc atgggcatcg  
 120  
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcggccaac  
 180  
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg  
 240  
 tggatgacgg tagtgctggc ggcgatgctt ggccaaatcg gcttaccggg cggcgggttc  
 300  
 ggttttggtt ggccctccaa cggcgcaggt acccccagagc cgcaaggggt gatcctgagc  
 360  
 ggtttctccg gttcccccg ctagccggca cgccatgcca agggggattt caaagggtac  
 420  
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc  
 480  
 gattggaatg gcaaacgcgt  
 500

<210> 1478  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1478  
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val  
 1 5 10 15  
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln  
 20 25 30  
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu  
 35 40 45  
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile  
 50 55 60  
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala  
 65 70 75 80  
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro  
 85 90 95  
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro  
 100 105 110  
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr  
 115 120 125  
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile  
 130 135 140  
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

145                      150  
Asp Trp Asn Gly Lys Arg  
                         165

155

160

<210> 1479  
<211> 421  
<212> DNA  
<213> Homo sapiens

<400> 1479  
acgcgtgtgg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggcacac  
60  
ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca  
120  
cgctgggctt tttttgtttg ctgttttggg tgggggtgtgc tagtgacagt tccgggtgtac  
180  
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctgggtaaac  
240  
aaatgccaaag tttgacaaaa aacagtgaaa taaagcaaaa gattttgaaa aatgcttcat  
300  
catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gcccagcctg  
360  
agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg  
420  
t  
421

<210> 1480  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 1480  
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr  
1                      5                      10                      15  
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala  
                         20                      25                      30  
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser  
                         35                      40                      45  
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly  
50                      55                      60  
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys  
65                      70                      75                      80  
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln  
                         85                      90                      95  
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln  
                         100                      105                      110  
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr  
115                      120                      125  
Glu Asn Tyr Ile Arg  
130

<210> 1481  
<211> 545



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1481

gtcgggtcgc cgcccagtct cgtgccgaca tgcagttcct ggcccgggag gtcgcatcca  
 60  
 tccggatgca gatgggagag ttggccacgc gcgattattt gcgctcggag ctacgcgacg  
 120  
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgacccggt  
 180  
 tcgcgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc  
 240  
 gagaaccagc tggttaaggc cattgccgat gcgttgctgc acgtcaatga ccccgagatc  
 300  
 aaacgcccc aaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc  
 360  
 gctttcgtcc gcatectgct gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag  
 420  
 caggccaccg aggctgtgcg cagcgttgac ggggtgacca gtgtttccgt cgaactcggc  
 480  
 accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa  
 540  
 cgcgt  
 545

&lt;210&gt; 1482

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
1				5				10					15		
His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20					25					30			
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
		35				40					45				
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
		50			55					60					
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65				70				75						80	
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
			85				90							95	
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
				100											

&lt;210&gt; 1483

&lt;211&gt; 625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1483

gtacggcttc gagagggcta cagtgtccga gaggtcacac tggccaaagg aggggtcccaa  
 60

ttggaggtaa agctgggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg  
 120  
 gcacccctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa  
 180  
 ggcggtacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg  
 240  
 tatcgtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac  
 300  
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttcctgac  
 360  
 agcaccaaga ggggagtgcc actcttctac atccctccag gctccaccac cccgggtgctc  
 420  
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgccta ctggaagccc  
 480  
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcttgggtgct  
 540  
 aatcctggag catgacacac caatcccaaa gcacttgac accccgggca gcaatgggag  
 600  
 ctactacgga gagaagacaa cgcgt  
 625

&lt;210&gt; 1484

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5					10					15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40				45				
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55				60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90						95	
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100				105					110			
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130					135					140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145				150				155						160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

&lt;210&gt; 1485

&lt;211&gt; 2058

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1485

ntatgttcag cggtcaacga tattggctac cactatgggtg ccatgggtcgt cgatgctgcg  
60  
ctgttccctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt  
120  
gttggcgata ttacttctga atcacctgtct aaaatgtggc ataccagaac tttattgaat  
180  
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatggtggga ccttcctatg  
240  
ccagcccaga gaaaatctgc ttctgccgat ttgattgaag aaaatcctag cagcgttaag  
300  
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct  
360  
aagggtgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt  
420  
tataaaagaa ctgcaccga tagctttgga gttaaagcgc agcgtgctga agtgcggttt  
480  
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg  
540  
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt  
600  
atgggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcaactaacg  
660  
ggtgatggtg ttgtagtgcc ggttgtatcc cacatagcca ctcatatttt tgacccagtg  
720  
atggagcgtg tgtttgagga tgcggcgagg ctgcttaagc aaatcgcata gcatcgtttt  
780  
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg  
840  
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg  
900  
aagctgaatt ttatgatagc ggctctttc ggggggctat cgagcgaatt cgaggacagt  
960  
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg  
1020  
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg  
1080  
taactctcaa ttctgggcgc aaagctgcta ttgagctgaa aggggtgcctt gatggcaata  
1140  
acactaacat ctttgatcgc cccctcagg cagaagaatt tgttatctgg agtgtatgca  
1200  
caaacctcgg tgctgaccct cagcataatg ttgggtctgg gcttcacacc agactaagt  
1260  
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttgtg  
1320  
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg  
1380  
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa  
1440  
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaata aaagcgtttc  
1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatc  
 1560  
 atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatgggtg gagcgtgaat  
 1620  
 cggaatgac ggcaataagg cggctttaat ttgtgcatgc ctatgctgca tgaatccgca  
 1680  
 tgatcgtttg aggatcgttt ttgctgagggc cggccagttc tggtagggctt ttgcttatgt  
 1740  
 catgcacctg catgaaaacc gctacataaa gcgggcagggc gtggcgggga tacgagcgcg  
 1800  
 cgcaacgggg tgaaatgggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc  
 1860  
 gggtaggggtg agtgagagggc agcaataaag aagcgccccg cagaatgctg ctggggcgct  
 1920  
 gtgagaggtg gtcttgttgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca  
 1980  
 gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc  
 2040  
 gcagtcgctt ctgcaggc  
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
1			5					10					15		
Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
	20							25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
	35					40						45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
	50					55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65					70				75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
		85						90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
		115				120						125			
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
	130					135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145					150				155					160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
		165						170					175		
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
		180					185						190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
	195					200					205				
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		240
	245	250
		255

<210> 1487  
 <211> 823  
 <212> DNA  
 <213> Homo sapiens

<400> 1487  
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 60  
 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg  
 120  
 catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat  
 180  
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc  
 240  
 ttcttggggc ggtgaggtca ggcagggagg tgggtgagag gtcattggggc cgcaggcaaa  
 300  
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc  
 360  
 gtgggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagccctttc tcttggggac  
 420  
 tgggagaggc cggcagttag ggaagaatgg cctcgggtcg tgcgtagaga atgtagggga  
 480  
 cacagggcct ctacagggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg  
 540  
 tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtgggtcag  
 600  
 gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc  
 660  
 cccctacat tcttggggca cccactgtag gccaggccct gtgccggatc tgatgataca  
 720  
 gtgatgacta agtcacagtc cctgcctctg agggccccc atgtgtgccg gacagccaag  
 780  
 caaccaata tgttaaaatc cagtgtcagg accnaggag aag  
 823

<210> 1488  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 1488  
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu  
 1 5 10 15  
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu  
 20 25 30  
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg  
 35 40 45  
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

```

      50      55      60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65      70      75      80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85      90      95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100      105      110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115      120      125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130      135      140
Ala Leu Gly Arg Ala
145

```

<210> 1489  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1489
nnccagtcca cgtcaagct ggccgcggcc ggcgaacaca atgtgcgcaa tgcgctggcc
60
gcgattgcct ggcgcgtggg tgccggcatc aaccaggacg ccatcgtgcg cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtacccg cgccgcgcat cctggtggtg ggcgacatgg gcgaagtcgg cgcacagggg
300
aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
342

```

<210> 1490  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1490
Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1      5      10      15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20      25      30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35      40      45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50      55      60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65      70      75      80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85      90      95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100      105      110
Thr Arg

```

<210> 1491  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1491  
 ncctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac  
 60  
 atgggggtag attacctttc ttcccagctc gactgggctg gatatcaggt gtccaccaca  
 120  
 tgggggctcag gtcccactcc caaaggagta gccatcaccc acgagtcggc ggtcaatacg  
 180  
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca  
 240  
 gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc  
 300  
 ttggtgttgc catctccagc agacaaacgt gat  
 333

<210> 1492  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1492  
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln  
 1 5 10 15  
 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile  
 20 25 30  
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu  
 35 40 45  
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe  
 50 55 60  
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr  
 65 70 75 80  
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp  
 85 90

<210> 1493  
 <211> 1316  
 <212> DNA  
 <213> Homo sapiens

<400> 1493  
 nggtaccagg gcaaagaagg ctggggccccc gcctcctacc taaagaagaa cagtggggag  
 60  
 cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttggat  
 120  
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg  
 180  
 gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag  
 240

atgaggcaga gacccccctcc tcgccgggac atgaccattc ctcgaggcct caacctgccg  
 300  
 aagccgcccc tccccgcccc agtggaggaa gattattaca ccatcgccga attccagaca  
 360  
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgagggtgat cgagaaaaac  
 420  
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtggggccc ggccaccttc  
 480  
 attgacaagt acaagaagac gagcaacgcg tcgagacca actttctggc tccccctgcc  
 540  
 cacgaggtga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc  
 600  
 gaagccacgg gccctccccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg  
 660  
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac  
 720  
 atgtctgcgt cagcaggcta cgaggagatc tcagaccccc acatggagga gaagcccagc  
 780  
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg  
 840  
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg  
 900  
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa  
 960  
 cctgacaaaa gcagactggt ccagctgaaa aatgacatgg ggctggagtg tggccacaag  
 1020  
 gtcttgccca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac  
 1080  
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag  
 1140  
 gttaggccaa aaccagctcc tcccccaaa acggagccac ctcagggcga agaccaagtc  
 1200  
 gacatctgca acctcaggag taagctcagg cctgccaaagt cccaagacaa gtccttggtg  
 1260  
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt  
 1316

&lt;210&gt; 1494

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5					10					15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35				40					45			
Val	Gly	Arg	Glu	Lys	Glu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe	
	50					55				60					
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly





ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtccggga  
 120  
 gagggcaggg cgcggaacatg gggcatgtgg cgatgtgttt caccacccac tcccgcctga  
 180  
 agtgccactg tgagcccaac ccacgggtgcc aggctgggct gcactccagg ctctgcagc  
 240  
 agaccacact cctcagcctc cttcccctga aggctgggca tggcctggac aaaggggtgc  
 300  
 ctctctgct gtgccatgct gacgtggca  
 329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1			5				10				15			
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly
		20					25				30			
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln
		35				40					45			
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly
	50					55				60				
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala
65					70				75					80
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu
			85					90					95	
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp						
			100					105						

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgacaggt tggcgggccga cttggaagcc gctgcagcac  
 60  
 ttgacgcggg gcgatctcga agcgttcggt cttggcctga cggtcgatgg ctgcggcgtg  
 120  
 ccgttgatcg cgcaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa  
 180  
 cgcaactcac ggagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga  
 240  
 caagaagcgg atcccgagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga  
 300  
 gcagccttac gcgcccgatg cagtcattc tttcgggcca cgcgt  
 345

<210> 1498

<211> 104

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
          20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
          35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
          50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ala Ser Lys
          85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
          100

```

&lt;210&gt; 1499

&lt;211&gt; 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1499

```

aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccgtt ttggttgcat tctttggctg
180
gatgcacaat cacaaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgctg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

&lt;210&gt; 1500

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
          20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
          35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
          50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65              70              75              80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
              85              90              95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
              100              105              110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
              115              120              125
Pro Ala Ser Thr Leu Ser
              130

```

<210> 1501  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1501
nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttcctg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacgggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcggaca tctactccac gggcatcacc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggccg cccatcaagc
360
tt
362

```

<210> 1502  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1502
Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
1              5              10              15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
              20              25              30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
              35              40              45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
              50              55              60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65              70              75              80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
              85              90              95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
              100              105              110
Leu Arg Glu Gly Arg Pro Ser Ser
              115              120

```

<210> 1503  
 <211> 623  
 <212> DNA  
 <213> Homo sapiens

<400> 1503  
 gccggcgtaga ggcagagaaa cgctcctcgcc ctgtcattcc accctgaaga gactgacgac  
 60  
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa  
 120  
 gggctcatga cgaccctccc tgaacactgt tcaaaggcg acggcttacc attcctcgct  
 180  
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc  
 240  
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag  
 300  
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgtg gtggtgccag  
 360  
 attcacgggt accgaaaccc ggtcctcgac gaggcctca accgtcaaag ctcccagttc  
 420  
 agtcacgtca tgtttgccgg actcaccat aaggccgagg ttgacgccgt catatcccta  
 480  
 gtgcgcctgg ccccggggcc cctcgaccgg atcttctctg ctgattccgg gtctgtcggc  
 540  
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaactg ctgcaccgc agcgcgaggc  
 600  
 ggcactttga cgaggacacg cgt  
 623

<210> 1504  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 1504  
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe  
 1 5 10 15  
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His  
 20 25 30  
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala  
 35 40 45  
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His  
 50 55 60  
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His  
 65 70 75 80  
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser  
 85 90 95  
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val  
 100 105 110  
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg  
 115 120 125  
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys  
 130 135 140  
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

1244

130                      135                      140  
 Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly  
 145                      150                      155                      160  
 Tyr Arg Thr Glu Ile Arg Gln Tyr Ala  
                          165

<210> 1507  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<400> 1507  
 agatctctta agatgtgctc attatcatga gaacagcgtg gaggaaccca cccccaggat  
 60  
 ccagttacct ccacttgctc tgcccttggc acgtggggct tatggggatt acaattcaag  
 120  
 gtgagacttg ggtggggaca cagtgggaaca tgaagtgtgc cacgctgggt ggatgacgcc  
 180  
 ctccctcccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcaactcgga  
 240  
 aagggcagaa tgtacaggaa cagagtgaga ttgcgagggc ctggggctga gggaggggac  
 300  
 gcactagagg aaggcaaagg ggagcctcct ggggtgtgggg agcactttct gtcttggttt  
 360  
 tgggtggtggc tgcacagtgg cccacacccg tcagagctca cctgcctgca cccaggccct  
 420  
 ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca  
 480  
 cgcaccggta cctgggggacc gggggtcctc ggtgatcatc ccgagctcca agacagaagc  
 540  
 tggactacag ccgtgctgag tggaggggtt tgggtggctgg gtgcccgcct cctattgctc  
 600  
 ctgcagactc tggggctctg ggcgccccca gtggggcaat gtgggctgct gcagggaact  
 660  
 cacgcgt  
 667

<210> 1508  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1508  
 Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly  
 1                      5                      10                      15  
 Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His  
                          20                      25                      30  
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser  
                          35                      40                      45  
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln  
                          50                      55                      60  
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly  
 65                      70                      75                      80  
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

```
<210> 1509
<211> 463
<212> DNA
<213> Homo sapiens
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```
<210> 1510
<211> 99
<212> PRT
<213> Homo sapiens
```

<210> 1511  
<211> 633



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1511

gccggcaccg gcgtcaaggc catggcgctg ggccccggat gggtagacac cgaattccac  
 60  
 tcacgcgccca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt  
 120  
 ctgggtacgcg aggctctcaa cgaccttgac catgacaagg tagtatccat tctacccccg  
 180  
 ctctggaagt tcttcatcgc agtggccaca cataccccac gttccgctat gagattcctg  
 240  
 tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggagggc  
 300  
 gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct  
 360  
 gtccgcccgcg acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt  
 420  
 cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacgggtg ccttacgtcg  
 480  
 ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaagc  
 540  
 ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga  
 600  
 aggccatcgc tccggtgctc ttcttcaacg cgt  
 633

&lt;210&gt; 1512

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1512

Ala	Gly	Thr	Gly	Val	Lys	Ala	Met	Ala	Leu	Gly	Pro	Gly	Trp	Val	His
1				5					10					15	
Thr	Glu	Phe	His	Ser	Arg	Ala	Asn	Val	Thr	Gly	Asn	His	Leu	Pro	Asp
			20				25						30		
Phe	Phe	Trp	Ile	Asp	Ala	Glu	Val	Leu	Val	Arg	Glu	Ala	Leu	Asn	Asp
			35				40					45			
Leu	Asp	His	Asp	Lys	Val	Val	Ser	Ile	Pro	Thr	Pro	Leu	Trp	Lys	Phe
		50				55					60				
Phe	Ile	Ala	Val	Ala	Thr	His	Thr	Pro	Arg	Ser	Ala	Met	Arg	Phe	Leu
65					70					75				80	
Ser	Arg	Thr	Leu	Ser	Ser	Arg	Asp	Lys	Asp	Asp	His	Pro	Arg	His	
			85					90						95	
Thr	Pro	Gly	Gly	Glu	Ala										
					100										

&lt;210&gt; 1513

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1513

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 60  
 ttggtcgtcc aatctcgtaa tgcccttctg aatgacttgc tgggcctgcc tctgacacg  
 120  
 gctgtttcgc aggaaccgcc actcccgctc cttgcggatc tgactctcca ggtcgtgctc  
 180  
 ttctgggacg ttcacgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccg  
 240  
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag  
 300  
 tctgctctgg gcccttgctg aacatcttcc gtgtccgggg gaactggtgg gagtgaagggg  
 360  
 tgtactgcgc ccacgcgggg cctgtggtgc ccggccggcc g  
 401

&lt;210&gt; 1514

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Asp	Ala
1				5					10					15	
Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe	Cys
			20					25					30		
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
		35					40					45			
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
	50					55					60				
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
65					70				75					80	
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
			85					90						95	
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala				
			100					105							

&lt;210&gt; 1515

&lt;211&gt; 720

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1515

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 120  
 aactacgagc ctgacctgac cgacgatgcg acgtcgggtcc cgctcgccgt cgtcattgac  
 180  
 gatcccgccc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat  
 240  
 gagacccatg tcaaagggct aaccgcctt caccctctcg ttcctgagca tcttcgcagc  
 300  
 acctatgccg ggcttgcceta tccggctgtt atcgaacacc tcaagtcaat cggagtaaca  
 360

gccatcgaac tactaccctt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc  
 420  
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 480  
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatgggtgac gtctttccac  
 540  
 gaagccggca tcgaggtttt cctcgatgtc gtctacaacc aactgggtga gggcggccat  
 600  
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<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

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Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35					40					45			
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65				70					75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85					90					95		
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100						105					110		
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
	115						120					125			
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135				140					
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145				150					155					160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165					170					175		
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180						185					190		
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
	195					200						205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn	
	210					215				220					
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225					230					235				240	

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

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 180  
 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttccagaa ggtgacagag  
 240  
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gacctggga  
 300  
 tcaaggcttt ccactgcagc caacattgga cacatggaca cacccaagga gctctggcgg  
 360  
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cggtggtggg cttcctggcg  
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 480  
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 497

<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518  
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 20 25 30  
 Pro Pro Ser Pro Leu Lys Glu Thr Ser Phe Ser Ile Gly Leu Gln Val  
 35 40 45  
 Leu Phe Pro Phe Leu Leu Ala Gly Phe Gly Thr Val Ala Ala Gly Met  
 50 55 60  
 Val Leu Asp Ile Val Gln His Trp Glu Val Phe Gln Lys Val Thr Glu  
 65 70 75 80  
 Val Phe Ile Leu Val Pro Ala Leu Leu Gly Leu Lys Gly Asn Leu Glu  
 85 90 95  
 Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Ala Asn Ile Gly His Met  
 100 105 110  
 Asp Thr Pro Lys Glu Leu Trp Arg Met Ile Thr Gly Asn Met Ala Leu  
 115 120 125  
 Ile Gln Val Gln Ala Pro Val Val Gly Phe Leu Ala Ser Ile Ala Ala  
 130 135 140  
 Val Val Phe Gly Trp Ile Pro Asp Gly His Phe Ser Ile Pro His Ala  
 145 150 155 160  
 Phe Leu Leu Cys Gly  
 165

<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens

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<400> 1519
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120
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240
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480
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540
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600
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag
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caagaaaccc ctgcagtact tgaagatttg cataaagcca acattcgac cgatcgggtc
720
acaggtgaca gtatgttgac tgctgtctct gtggccagag attgtggaat gattctacct
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aattggcatt atgcagaetc cctcacgcag tgcagtcac catcagcaat tgaccagag
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1020
aagttgatgt tgcatggcac cgtgtttgcc cgtatggcac ctgatcagaa gacacagttg
1080
atagaagcat tgcaaaatgt tgattatctt gttgggatgt gtggtgatgg cgcaaatgat
1140
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1200
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1320
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1380
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1440
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1500
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1560

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gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca  
 1620  
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 1680  
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 1740  
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 1800  
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 1860  
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 1920  
 atcattgttc ttgtcaatgc ctttgtgtct atcacagtgg agaacttctt ccttgacatg  
 1980  
 gtcctttgga aagttgtgtt caaccgagac aaacaaggag agtatcggtt cagcaccaca  
 2040  
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 2076

<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

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			20					25					30		
Ala	Cys	Met	Ala	Thr	Cys	His	Ser	Leu	Thr	Lys	Ile	Glu	Gly	Val	Leu
		35					40					45			
Ser	Gly	Asp	Pro	Leu	Asp	Leu	Lys	Met	Phe	Glu	Ala	Ile	Gly	Trp	Ile
	50					55					60				
Leu	Glu	Glu	Ala	Thr	Glu	Glu	Glu	Thr	Ala	Leu	His	Asn	Arg	Ile	Met
65					70					75				80	
Pro	Thr	Val	Val	Arg	Pro	Pro	Lys	Gln	Leu	Leu	Pro	Glu	Ser	Thr	Pro
				85					90					95	
Ala	Gly	Asn	Gln	Glu	Met	Glu	Leu	Phe	Glu	Leu	Pro	Ala	Thr	Tyr	Glu
		100						105					110		
Ile	Gly	Ile	Val	Arg	Gln	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met
	115					120						125			
Ser	Val	Val	Ala	Arg	Val	Leu	Gly	Asp	Arg	Lys	Met	Asp	Ala	Tyr	Met
	130					135					140				
Lys	Gly	Ala	Pro	Glu	Ala	Ile	Ala	Gly	Leu	Cys	Lys	Pro	Glu	Thr	Val
145					150					155				160	
Pro	Val	Asp	Phe	Gln	Asn	Val	Leu	Glu	Asp	Phe	Thr	Lys	Gln	Gly	Phe
			165						170					175	
Arg	Val	Ile	Ala	Leu	Ala	His	Arg	Lys	Leu	Glu	Ser	Lys	Leu	Thr	Trp
		180						185					190		
His	Lys	Val	Gln	Asn	Ile	Ser	Arg	Asp	Ala	Ile	Glu	Asn	Asn	Met	Asp
	195					200						205			
Phe	Met	Gly	Leu	Ile	Ile	Met	Gln	Asn	Lys	Leu	Lys	Gln	Glu	Thr	Pro
	210					215					220				
Ala	Val	Leu	Glu	Asp	Leu	His	Lys	Ala	Asn	Ile	Arg	Thr	Val	Met	Val

225		230		235		240
Thr Gly Asp Ser Met Leu Thr Ala Val Ser Val Ala Arg Asp Cys Gly						
	245		250		255	
Met Ile Leu Pro Gln Asp Lys Val Ile Ile Ala Glu Ala Leu Pro Pro						
	260		265		270	
Lys Asp Gly Lys Val Ala Lys Ile Asn Trp His Tyr Ala Asp Ser Leu						
	275		280		285	
Thr Gln Cys Ser His Pro Ser Ala Ile Asp Pro Glu Ala Ile Pro Val						
	290		295		300	
Lys Leu Val His Asp Ser Leu Glu Asp Leu Gln Met Thr Arg Tyr His						
305		310		315		320
Phe Ala Met Asn Gly Lys Ser Phe Ser Val Ile Leu Glu His Phe Gln						
	325		330		335	
Asp Leu Val Pro Lys Leu Met Leu His Gly Thr Val Phe Ala Arg Met						
	340		345		350	
Ala Pro Asp Gln Lys Thr Gln Leu Ile Glu Ala Leu Gln Asn Val Asp						
	355		360		365	
Tyr Phe Val Gly Met Cys Gly Asp Gly Ala Asn Asp Cys Gly Ala Leu						
370		375		380		
Lys Arg Ala His Gly Gly Ile Ser Leu Ser Glu Leu Glu Ala Ser Val						
385		390		395		400
Ala Ser Pro Phe Thr Ser Lys Thr Pro Ser Ile Ser Cys Val Pro Asn						
	405		410		415	
Leu Ile Arg Glu Gly Arg Ala Ala Leu Ile Thr Ser Phe Cys Val Phe						
	420		425		430	
Lys Phe Met Ala Leu Tyr Ser Ile Ile Gln Tyr Phe Ser Val Thr Leu						
	435		440		445	
Leu Tyr Ser Ile Leu Ser Asn Leu Gly Asp Phe Gln Phe Leu Phe Ile						
	450		455		460	
Asp Leu Ala Ile Ile Leu Val Val Val Phe Thr Met Ser Leu Asn Pro						
465		470		475		480
Ala Trp Lys Glu Leu Val Ala Gln Arg Pro Pro Ser Gly Leu Ile Ser						
	485		490		495	
Gly Ala Leu Leu Phe Ser Val Leu Ser Gln Ile Ile Ile Cys Ile Gly						
	500		505		510	
Phe Gln Ser Leu Gly Phe Phe Trp Val Lys Gln Gln Pro Trp Tyr Glu						
	515		520		525	
Val Trp His Pro Lys Ser Asp Ala Cys Asn Thr Thr Gly Ser Gly Phe						
	530		535		540	
Trp Asn Ser Ser His Val Asp Asn Glu Thr Glu Leu Asp Glu His Asn						
545		550		555		560
Ile Gln Asn Tyr Glu Asn Thr Thr Val Phe Phe Ile Ser Ser Phe Gln						
	565		570		575	
Tyr Leu Ile Val Ala Ile Ala Phe Ser Lys Gly Lys Pro Phe Arg Gln						
	580		585		590	
Pro Cys Tyr Lys Asn Tyr Phe Phe Val Phe Ser Val Ile Phe Leu Tyr						
	595		600		605	
Ile Phe Ile Leu Phe Ile Met Leu Tyr Pro Val Ala Ser Val Asp Gln						
	610		615		620	
Val Leu Gln Ile Val Cys Val Pro Tyr Gln Trp Arg Val Thr Met Leu						
625		630		635		640
Ile Ile Val Leu Val Asn Ala Phe Val Ser Ile Thr Val Glu Asn Phe						
	645		650		655	
Phe Leu Asp Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln						





cagcatggca ccgatgccga gaggagacac aaaaaactgc ctctgacagc tcttgctcaa  
 120  
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg  
 180  
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 240  
 aaggagatcg tggacctctc gtacggcata gctgaggtgg agattcccaa catccagaag  
 300  
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac  
 360  
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta  
 420  
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<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

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Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
		20						25					30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
		35					40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
	50					55				60					
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65					70					75					80
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
			85						90					95	
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
		100						105					110		
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
		115						120				125			
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
	130						135					140			
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145					150					155					160
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
			165						170					175	

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

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 120  
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 180  
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 240  
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 294

<210> 1526

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1526

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Asn	Val	Asp	Tyr	Trp	Ser	Gly	Leu	Leu	Val	Asp	Tyr	Thr	Ser	Gln	His
		20					25						30		
Gly	Val	Asp	Val	Leu	Val	Lys	Gly	Leu	Arg	Ser	Ser	Leu	Asp	Tyr	Glu
		35				40						45			
Tyr	Glu	Leu	Pro	Met	Ala	Gln	Met	Asn	Arg	Arg	Leu	Ser	Gly	Ile	Asp
	50					55					60				
Thr	Val	Phe	Leu	Leu	Thr	Asp	Glu	Lys	Tyr	Gly	Tyr	Ile	Ser	Ser	Ser
65				70					75					80	
Leu	Cys	Lys	Gln	Val	Ala	Gln	Phe	Gly	Gly	Glu	Val	Thr	Gly	Met	Leu
			85					90						95	

Arg Ile

<210> 1527

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1527

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 120  
 acttcgccct ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgcg  
 180  
 aagacattga cgcgctgggt tacgacgggtg tgttcgaggc cggcatgacc atctgtgtgg  
 240  
 aaagctacat cggccacgac gacggcggcg aaggcgtgaa gctcgaagaa cagatctaca  
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 371

<210> 1528

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1528

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      20             25             30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
      35             40             45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
      50             55             60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65             70             75             80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
      85             90             95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
      100             105

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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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naccgctggt gctcaccctc cgtgtgactc gcgctctgtc cggctcaggg ctgcacctcc
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120
gctcagggct cgcctccgt gggacttgcg ctctgtccgg ctcagggctc gccctccgtg
180
ggacttgccg tctgtccggc tcagggctcg cctccgtgg gacttgcgct ctgtccggct
240
cagggctcgc cctccgtggg acttgcgctc tgccggctc agggctcgcc ctccgtggga
300
tttgcgctct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
360
gcggctcctt ccaccagcc cccatctccg gccggccatt tgtgaggccc tctgccactg
420
aggtgcactg tttccaattc ctcatcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattggtct caccactctg cgaggagcac agcctcttct ccaccgtcca
540
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600
ccattcacg
609

```

<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

```

Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

```

```

      1           5           10           15
Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala
      20           25           30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser
      35           40           45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val
      50           55           60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala
      65           70           75           80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu
      85           90           95
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala
      100          105          110
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu
      115          120          125

```

<210> 1531  
 <211> 726  
 <212> DNA  
 <213> Homo sapiens

<400> 1531  
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 120  
 acattcggca agcatgagga cggggagcat cgagaccgcg acagctcggc gaaggaattt  
 180  
 cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa  
 240  
 cagggcgctc tcaggtggtc ttggggctcg acttcgtctc cgttcccggc accttcccag  
 300  
 tgcgcatggc caggtggttc aagtcggggc ggatcagtca taccgctgcg ctcagctccg  
 360  
 gcttttcacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggatttttagc  
 420  
 acccccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgct  
 480  
 tcaccgagcg cggcggtttc ggcagcttcc acatggggat cagaccatat tgatgcactg  
 540  
 gcgatccctt catacgcgag ccgccgatat ggcccccgag tgaggcccct cagttcgcgc  
 600  
 tgacgcatgc cgctctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc  
 660  
 cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctggct caccgctccg  
 720  
 cgagag  
 726

<210> 1532  
 <211> 178  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1532

Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu  
 1 5 10 15  
 Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr  
 20 25 30  
 Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala  
 35 40 45  
 Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn  
 50 55 60  
 Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser  
 65 70 75 80  
 Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp  
 85 90 95  
 Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg  
 100 105 110  
 Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser  
 115 120 125  
 His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg  
 130 135 140  
 Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr  
 145 150 155 160  
 Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala  
 165 170 175  
 Pro Glu

&lt;210&gt; 1533

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1533

natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg  
 60  
 gagattattc acagcgaacg ggcgaccggc ggtgcgccgc ttaacgtcct gctgacgctg  
 120  
 gttaaaatgc acgtcggcct gccgttcag gcggtcggtc ttatcggcga agacagcgat  
 180  
 ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc  
 240  
 accacgtttg ccccccacgtc gatgtcgcag gtgatgaccg atcccactgg gcagcgcacc  
 300  
 tttttccatt cgctgcgcgc caatcgccctg ctcgatctcc ccgcctttga tcgactcgac  
 360  
 gcgt  
 364

&lt;210&gt; 1534

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1534

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

      1           5           10           15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20           25           30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35           40           45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50           55           60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
      65           70           75           80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85           90           95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100           105           110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115           120

```

<210> 1535  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1535
gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaataccgc
60
caatccctgg gggccgcggt gcgtagccggc cagcggccag tcctggcccg gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accgggccta tcgccgcggc ccattggctgc
180
aaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccggt
360
actggccac
369

```

<210> 1536  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1536
Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
1           5           10           15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
      20           25           30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
      35           40           45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
      50           55           60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
      65           70           75           80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```

				85						90						95
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe		
			100					105						110		

&lt;210&gt; 1537

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1537

ccactcgcgg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt  
60  
ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttgtt  
120  
cctcacgcgc cccggggaga tgggtggcca gctggccgtg ctcaccgagg agacctcgtc  
180  
ggcgtggtgg agacactgac ccaccaggcc cgggcgacca cggatcatgc cgttcgggac  
240  
tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgcag gtac  
294

&lt;210&gt; 1538

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1538

Pro	Leu	Ala	Ala	Pro	Pro	Glu	Pro	Ser	Arg	Val	Ser	Gly	Arg	Gln	His
1				5				10						15	
Pro	Val	Arg	Val	Leu	Gly	Ala	Ala	Ala	Arg	Val	Pro	Ala	Glu	Asp	Arg
			20					25					30		
Gln	Pro	Gly	Gly	His	Leu	Leu	Val	Pro	His	Ala	Pro	Arg	Gly	Asp	Gly
			35				40					45			
Gly	Pro	Ala	Gly	Arg	Ala	His	Arg	Gly	Asp	Leu	Val	Gly	Val	Val	Glu
	50					55				60					
Thr	Leu	Thr	His	Gln	Ala	Arg	Ala	Thr	Thr	Val	His	Ala	Val	Arg	Asp
65				70						75				80	
Ser	Glu	Leu	Ala	Lys	Leu	Pro	Ala	Gly	Ala	Leu	Thr	Ser	Ile	Lys	Arg
			85					90						95	

Arg Tyr

&lt;210&gt; 1539

&lt;211&gt; 1015

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1539

acgcgttcgg gcgtcaggca cacgcatctc aacagatgtg gctgacaccc aaggcagtcg  
60  
gcctcagtcg cctgtcaccc acctagaacc tggtcacagc atgtcatccg ggctgctctg  
120  
gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa  
180

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct  
 240  
 gacgcatcct ggcctcacc taggcctcct ctgtcggggc agcctggctc agcagagccc  
 300  
 gggacacacg gctgaggcca cccaggctgg gccatcttgc cctgttttg tggccctac  
 360  
 tcagttctcc ttctgtctg gctcaggctc aggccagtca agaggggtggc tgagaagcag  
 420  
 gaggagcctc agagaccctc ccctcgaaag cactggggct tccacctcac aagcggcagg  
 480  
 ttctgttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg  
 540  
 gttgccgatc catcgtccag gcctggccca ggagccggtg aggaacctgg ggctgttgtg  
 600  
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac  
 660  
 ctggctgcat cgaatcccac catggcccag aggggtggacc tgtggctcct tggggggcca  
 720  
 gcatccccag tctaattgggt gccctgcca ctctcctgag ttcccgtaga gagtcccc  
 780  
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat  
 840  
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag  
 900  
 cagccccgat gacatgctat gaacaggttt taggtgggtg acagggcact gaggccgact  
 960  
 gccttgggtg tcagccacat ctgttgagat gcgtgtgcct gacgcccga cgcgt  
 1015

&lt;210&gt; 1540

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5					10					15	
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
			20					25					30		
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
		35					40					45			
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
	50					55					60				
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65					70					75				80	
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							
				85											

&lt;210&gt; 1541

&lt;211&gt; 1482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1541



cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaag ggaagcttag  
60  
cccgccgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc  
120  
gctatcgcg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgccccgga  
180  
gctgctggtg caggtgtga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc  
240  
cagtgtgccg cgcctggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg  
300  
cccgcgaccg cagcgcggag ggccgagcac tctacgcagt ggctcaacgc tgcccgccca  
360  
acaacgaaga caaagaggag ttcccgtgt ggcacctggc gcgctactga ctgcgcgcgc  
420  
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg  
480  
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc  
540  
cttcgcagac ctgcttcgtg acctctttcg aatggtgctc caagaggcag cttgtggacc  
600  
tggtgatgga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg  
660  
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc  
720  
tggtgtgta tgaaaaggaa gtggtcaagt tctcagctc acctgacctg gtccttcagt  
780  
ggactgagag gggctgccga caggtctccc acgtcttcac caactttggc aagggcaccc  
840  
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg  
900  
cccttgtagc ccaactccagt gtgagggtca ggatccgtct gtcctagcga ctggactact  
960  
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg  
1020  
atcctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc  
1080  
ctgaaatctt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt  
1140  
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac  
1200  
catgcttttc acttccactg catctctcgc tggtcaaaa cagcagaggt gtgtccattg  
1260  
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag  
1320  
cttaattgtt ttgttattca tttaatgact ttccctgctg ttacctaat acaaattgga  
1380  
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta  
1440  
ttctgtgtca aataaagtc agttggattc tggaaaaaa aa  
1482

&lt;210&gt; 1542

&lt;211&gt; 57

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1542

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Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1             5             10             15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
      20             25             30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
      35             40             45
Glu Trp Glu Phe Gln Lys Tyr Gly His
      50             55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgccctc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt ttctgcctct tcagatgggg tgtggccccc
300
cncnccccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1             5             10             15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
      20             25             30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
      35             40             45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
      50             55             60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
      65             70             75             80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
      85             90             95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1545

ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt  
60  
caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat  
120  
cgtctctgtc tcaagcacct cgcctgtttc caggttcaag gcctggatag tgcgagtgtc  
180  
gtactggtcg atcacttcca ccgagtggtc tgggtagccc cttgccattc gctttatgat  
240  
ctcaaccata gatgcatttg gcatgttcca gagcttgtag tccttaacga tctctctggc  
300  
gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtgggtgatgt accgtccaga  
360  
ac  
362

&lt;210&gt; 1546

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1546

Met	Val	Lys	Ser	Cys	Glu	Leu	Ala	His	Leu	Thr	Asp	Arg	Leu	Cys	Leu
1				5					10					15	
Lys	His	Leu	Ala	Cys	Phe	Gln	Val	Gln	Gly	Leu	Asp	Ser	Ala	Ser	Val
		20						25					30		
Val	Leu	Val	Asp	His	Phe	His	Arg	Val	Val	Trp	Val	Ala	Pro	Cys	His
		35					40					45			
Ser	Leu	Tyr	Asp	Leu	Asn	His	Arg	Cys	Ile	Trp	His	Val	Pro	Glu	Leu
		50				55					60				
Val	Leu	Leu	Asn	Asp	Leu	Ser	Gly	Val	Val	Glu	Asn	Leu	His	Ala	Ile
65					70					75					80
Val	Arg	Met	Gly	His	Cys	Gly	Asp	Val	Pro	Ser	Arg				
				85					90						

&lt;210&gt; 1547

&lt;211&gt; 429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1547

cgcggttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgctt  
60  
ctgccgcggt cggtgtgggt cagcgccgtg tcggcgtgga acctggagcg cgagcgccctg  
120  
cgcaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac  
180  
agcgtgggtg tgtggggggg gatgattgtc tgggtgggcg cggcggtgat tccgttcctg  
240  
atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac  
300  
gggcttaaac gccagaagtt gcccaacggg cgttatgaac ggtgttcgcc tcggcactcg  
360

tggaacagca accggattgt caccaatata tttctgttcc aacttcagcg gcattccgac  
 420  
 caccatgcc  
 429

<210> 1548  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1548  
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser  
 1 5 10 15  
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala  
 20 25 30  
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp  
 35 40 45  
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu  
 50 55 60  
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu  
 65 70 75 80  
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr  
 85 90 95  
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr  
 100 105 110  
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr  
 115 120 125  
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala  
 130 135 140

<210> 1549  
 <211> 443  
 <212> DNA  
 <213> Homo sapiens

<400> 1549  
 gtcgacaggc tccaggggtc tgttttgtag tgcacccgct gtggtgcaac atgcgtctgg  
 60  
 gcacaccagc gtcgcccgtt tcctgttgta gtctttcctc tctgactcca ggggtattgg  
 120  
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc  
 180  
 agaatccctg cactccacca ttcttgggca acactccctc taggattttg gtctcccttt  
 240  
 tctctctggc ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt  
 300  
 ggttttctcc actccccag ctgccgctg ggaggcgcca ctgcaaactt ccctggggtc  
 360  
 tcccagctgc tcagagatcc ccattgccctt ccctgatcag ctccctgccc ggttctcatc  
 420  
 ccgacgcggc tgcattggata ttc  
 443

<210> 1550

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1550  
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu  
 1 5 10 15  
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg  
 20 25 30  
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly  
 35 40 45  
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln  
 50 55 60  
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu  
 65 70 75 80  
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala  
 85 90 95  
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr  
 100 105 110  
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg  
 115 120 125  
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser  
 130 135

<210> 1551  
 <211> 306  
 <212> DNA  
 <213> Homo sapiens

<400> 1551  
 ccatggatag cccacctctg gcaactcaaca tgacttggtt gccacacacc aggaaacctc  
 60  
 agaggagcag ccagctggcc aagcaccctt gccctgtccc tgcgggctcc acaaaagctg  
 120  
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct  
 180  
 ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca  
 240  
 gctccttcct ccatttggtc ctaacacagc ctcccagga gaccaggggc atcccnnnnc  
 300  
 cccnnc  
 306

<210> 1552  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1552  
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr  
 1 5 10 15  
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys  
 20 25 30  
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

          35          40          45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
          50          55          60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
65          70          75          80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
          85          90          95
Ile Pro Xaa Pro Xaa
          100

```

<210> 1553  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1553
atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcgggccac
60
acgctactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cggggtcttc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccatgctg
300
attgcccget ttggccatgg ctgagctgag ctggagaact gcctctatgt ggtgggggga
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctgggggcaa caagtggatg atggtggccc ccttgcgga tggcgtcagc
480
aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgtat gaccctcgg agaacaggtg gacgatcaag
600
gccgagtgcc ccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
657

```

<210> 1554  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1554
Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
1          5          10          15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
          20          25          30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
          35          40          45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
          50          55          60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```

```

65          70          75          80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
          85          90          95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
          100          105          110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
          115          120          125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
          130          135          140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145          150          155          160
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
          165          170          175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
          180          185          190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
          195          200          205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
          210          215

```

&lt;210&gt; 1555

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1555

```

acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
60
ggaggagcct gccttgcggc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaaggggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

&lt;210&gt; 1556

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1556

```

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1          5          10          15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
20          25          30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
35          40          45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
50          55          60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

```
<210> 1559
<211> 556
<212> DNA
<213> Homo sapiens
```



&lt;400&gt; 1559

accggtggcg acggtatcgg tggcgcgctg atccttgccct cggaatcctt cgctgcagag  
 60  
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcatggagaa gctgctcatc  
 120  
 gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgcagga ttccggtgcc  
 180  
 gccggaatct cctgtgccac ctccgagctg gccagtgtg gcgacgggtg catgcacgtc  
 240  
 gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc  
 300  
 gagtcccagg agcggatggc cgcggtggtg cgccccgac agcttgaccg cttcatggag  
 360  
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga  
 420  
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcgac ggttgctcac  
 480  
 gacggaccgg ttctcgacat gccggccgcc cgtcctggtt ggattgatga gctcaacgag  
 540  
 aacgacgcta acgctg  
 556

&lt;210&gt; 1560

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25					30		
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55				60					
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65					70					75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85					90						95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
		100						105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
		115				120						125			
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135				140					
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150					155				160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165					170						175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
		180					185								

<210> 1561  
 <211> 466  
 <212> DNA  
 <213> Homo sapiens

<400> 1561  
 acgcgtgaaa ggtttgagag aagagagatg ccgctattga atctgctgga gttttacatc  
 60  
 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt  
 120  
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg  
 180  
 tgcggaatgg agaccattt tgtcattgat tcattctgacc gataaggcca tagtgcagtt  
 240  
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttgggaagg aactaccagg  
 300  
 cgttgcttta aattcccaat gtgttggttc gttactacta atttaatacc gtaagctcta  
 360  
 ggtaaagttc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcattc  
 420  
 tctctctgtg gcttttaggtc tgacattgta tttgacctt actagt  
 466

<210> 1562  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1562  
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro  
 1 5 10 15  
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr  
 20 25 30  
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln  
 35 40 45  
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala  
 50 55 60  
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser  
 65 70 75 80  
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser  
 85 90 95  
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu  
 100 105 110  
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu  
 115 120 125  
 Gly Met  
 130

<210> 1563  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1563

ctgggggggtg tgttcggcct gctgtcgggtg tacttgccgc gttgggtgca tgaaacaccg  
 60  
 atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta  
 120  
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggtt gctgtcggcg  
 180  
 ggtgtgggtg tggtcatect gatgaccccg accgtgctgc aaaccgtcta ccacttcagc  
 240  
 ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt  
 300  
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt  
 360  
 tgctgctggc cacttctcgg acgctgtatc acagcctgat ggcccagacg gaatgggtga  
 420  
 ataagtgtac gcgt  
 434

&lt;210&gt; 1564

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1564

Leu	Gly	Gly	Val	Phe	Gly	Leu	Leu	Ser	Val	Tyr	Leu	Pro	Arg	Trp	Leu
1				5					10					15	
His	Glu	Thr	Pro	Ile	Phe	Ala	Glu	Met	Gln	Gln	Arg	Lys	Thr	Leu	Ala
			20					25					30		
Ala	Glu	Leu	Pro	Leu	Arg	Ala	Val	Leu	Arg	Asp	His	Arg	Gly	Ala	Ile
		35					40					45			
Val	Leu	Ser	Met	Leu	Leu	Thr	Trp	Leu	Leu	Ser	Ala	Gly	Val	Val	Val
	50					55					60				
Val	Ile	Leu	Met	Thr	Pro	Thr	Val	Leu	Gln	Thr	Val	Tyr	His	Phe	Ser
65					70					75				80	
Pro	Thr	Val	Ala	Leu	Gln	Ala	Asn	Ser	Leu	Ala	Ile	Val	Thr	Leu	Ser
				85				90						95	
Leu	Gly	Cys	Ile	Ala	Ser	Gly	Ala	Leu	Ala	Asp	Arg	Phe	Gly	Ala	Gly
		100						105					110		
Arg	Val	Leu	Val	Thr	Gly	Trp	Arg	Cys	Cys	Trp	Pro	Leu	Pro	Gly	Arg
		115					120					125			
Cys	Ile	Thr	Ala												
		130													

&lt;210&gt; 1565

&lt;211&gt; 373

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1565

ccatggctcgt agcccttggt tcaacaagag ccgtctactg acgctaacc accatgagcc  
 60  
 agaggggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc  
 120  
 ctgcattcgg ccattttctc ccaagaatca ccataaagggt tgtcaaaatc aaggaccctg  
 180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt taccctccgag ggagaaaagc  
 240  
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccacaccgt gcattggcga  
 300  
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg  
 360  
 acaacacggg tac  
 373

<210> 1566  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1566  
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala  
 1 5 10 15  
 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile  
 20 25 30  
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu  
 35 40 45  
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val  
 50 55 60  
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala  
 65 70 75 80  
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val  
 85 90 95  
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly  
 100 105

<210> 1567  
 <211> 917  
 <212> DNA  
 <213> Homo sapiens

<400> 1567  
 agcttttttcg accgctgaag gagtgggata cccgctcccc agacactccc tttctagggg  
 60  
 aagccgctgc actcctgggg gacccagttt gatgcctcca ggaggataag tctgaagccg  
 120  
 ggttgggaag ggagcggaga ggcccaaaca gagcagcagg cagcgccctc tgctggcacc  
 180  
 ctggagacag cttcggctgc ggggcccctg ccttctagtc ctcccagct ttcaggacac  
 240  
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta  
 300  
 tctgggtagg gtgggaggca gtgtgtgag ccacaaatgc aaagcagagg ggacagatgt  
 360  
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca  
 420  
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgagggcgt gtccgggagg  
 480  
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc  
 540

attcgtgccca cagcggggac ctcggagcta tgccttgata aggcaagtga ggttacatgt  
 600  
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc  
 660  
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag  
 720  
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat  
 780  
 gacagcagta cgaatcgtgg ctctcctgag gcctgggttt cctcatatgt aaaatggggg  
 840  
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag  
 900  
 ggctgaagag ctgggtc  
 917

<210> 1568

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1568

Met	Gly	Pro	Ala	Leu	Pro	His	Val	Phe	Glu	Ser	Gln	His	Leu	Ser	Pro
1				5				10					15		
Leu	Leu	Cys	Ile	Cys	Gly	Ser	Gln	His	Cys	Leu	Pro	Pro	Tyr	Pro	Asp
		20					25						30		
Ser	Phe	Arg	Arg	Leu	Gly	Gly	Gln	Pro	Gly	His	Phe	Cys	Arg	Asp	Pro
		35				40						45			
Arg	Leu	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Gly	Gly	Leu	Glu	Gly	Arg	Gly
		50				55					60				
Pro	Ala	Ala	Glu	Ala	Val	Ser	Arg	Val	Pro	Ala	Glu	Gly	Ala	Ala	Cys
65					70				75					80	
Cys	Ser	Val	Trp	Ala	Ser	Pro	Leu	Pro	Ser	Gln	Pro	Gly	Phe	Arg	Leu
			85					90						95	
Ile	Leu	Leu	Glu	Ala	Ser	Asn	Trp	Val	Pro	Gln	Glu	Cys	Ser	Gly	Phe
			100					105						110	
Pro															

<210> 1569

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1569

ggagggcctg tgattctact gcaggcaggc acccccaca acctcacatg ccgggccttc  
 60  
 aatgcgaagc ctgctgccac catcatctgg ttccgggacg ggacgcagca ggagggcgct  
 120  
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt  
 180  
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc  
 240  
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc  
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc  
 360  
 acagccaacc cggagatct  
 379

<210> 1570  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1570  
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr  
 1 5 10 15  
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg  
 20 25 30  
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys  
 35 40 45  
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr  
 50 55 60  
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala  
 65 70 75 80  
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro  
 85 90 95  
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu  
 100 105 110  
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile  
 115 120 125

<210> 1571  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 1571  
 tgcgcacttt tccgctcccc atgggtcccc tggncgttga tcatgcccc gatgttcac  
 60  
 atcggcatct tcttcttctt gccaaagcggc caagccgtgc tccagtcttt ccagatggaa  
 120  
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttcgcaa cctgctggat  
 180  
 gacccacact acctgaattc cttccagcgc accgccgtgt tctcggtgct ggtggcaggg  
 240  
 gtcgggateg ccgtgtcact gggctctggcg atctttgccg accccatcac tccgtcgcca  
 300  
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg caccatgat cgccggc  
 357

<210> 1572  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1572.  
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

```

      1           5           10           15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
65           70           75           80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

```

&lt;210&gt; 1573

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1573

```

gaattcccat tgcacatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
60
tattgtacag attttgaat cggtagacgtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggtt ataacaccgc
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttggcaa
240
gcgacttcgg gagtacttca actctgagaa gctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

```

&lt;210&gt; 1574

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1574

```

Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
65           70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85           90           95

```

<210> 1575  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

<400> 1575  
 nnacgcgtca gagagatctg tgtgtcggga ggggtgcccc tcatcattga tgaccgcgta  
 60  
 catctcgttg ccgaaattgg ggccgatggg gtccatgttg ggcagtctga catgccggtc  
 120  
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc  
 180  
 gcccatgttg aggccgccct gtcccagggg cgtgacatcg tcgactatct gggagttggg  
 240  
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt  
 300  
 gatgtcgtca acgccagccc gtggccgggtg tgcgtcatcg gtgggggtgag cgcacccgat  
 360  
 gctcaagacg tagcccggtt gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg  
 420  
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g  
 471

<210> 1576  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

<400> 1576  
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile  
 1 5 10 15  
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His  
 20 25 30  
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly  
 35 40 45  
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu  
 50 55 60  
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly  
 65 70 75 80  
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu  
 85 90 95  
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val  
 100 105 110  
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly  
 115 120 125  
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro  
 130 135 140  
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr  
 145 150 155

<210> 1577  
 <211> 287  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1577

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 60  
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 120  
 ttgcgcgttg ccggggcagg cttccccgct cgcggccagc gcgccgccgg cgatctggtg  
 180  
 atcgagctgg agccgatgct gccgcaggcg ccgcacaagc aactgcacgc gctgatcgag  
 240  
 cagctcgacg tggcgctcgg gaagagcgcg acacgccatt ttccgga  
 287

&lt;210&gt; 1578

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1				5					10					15	
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
			20					25					30		
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35				40					45				
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85						90					95	

&lt;210&gt; 1579

&lt;211&gt; 2829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1579

nggggcgggg agcggacttc ctctctgag ggccgtgccg cgctgccaga tttgttcttc  
 60  
 cgccccctgcc tccgcggctc ggaggcgagc ggaagggtgcc ccggggccga ggcccgtgac  
 120  
 ggggcggggc ggagccccgg cagtccgggg tcgccggcga gggccatgtc gctgttgggg  
 180  
 gaccgctac aggccctgcc gccctcgccc gccccacgg ggccgctgct cgccccctcg  
 240  
 gccggcgca ccctcaaccg cctgcgggag ccgctgctgc ggaggctcag cgagctcctg  
 300  
 gatcaggcgc ccgagggccg gggctggagg agactggcgg agctggcggg gagtcgcggg  
 360  
 cgctccgcc tcagttgcct agacctggag cagtgttctc ttaagggtact ggagcctgaa  
 420  
 ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aaggttgac agtcacagaa  
 480

ttgagtgatt tctgcaggc tatggaacac actgaagttc ttcagcttct cagccccca  
540  
ggaataaaga ttactgtaaa cccagagtca aaggcagtct tggctggaca gtttgtaaa  
600  
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660  
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720  
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960  
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1020  
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ggtcatcctg ataataaaga gcaaacaact gaccagcctt tggcgaagga caagggtgcc  
1200  
cttttgatag gaaatatgaa ttaccgggag caccccaagc tcaaagctcc tttggtggat  
1260  
gtgtacgaat tgactaactt actgagacag ctggacttca aagtggtttc actgttggat  
1320  
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1380  
gtatatgggt tattatatta tgcaggacat gggtatgaaa attttgggaa cagcttcattg  
1440  
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1620  
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1680  
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1740  
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1800  
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1860  
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1920  
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1980  
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2040  
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2100

gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga tcttcccaag  
 2160  
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 2220  
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 2280  
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 2340  
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 2400  
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 2460  
 ggtaatccaa gtaatgttac accagcagat agctgtcatt gcagccggac tccagatgca  
 2520  
 tttatttcaa gtttcgctca ccattgcttca tgtcatttta gtagaagtaa tgtgccagta  
 2580  
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 2700  
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 2820  
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 2829

&lt;210&gt; 1580

&lt;211&gt; 824

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
1				5					10					15	
Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35				40					45				
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
	50					55				60					
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70				75					80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85					90					95		
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
		115				120					125				
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
	130					135					140				
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

165 170 175  
 Phe Asn Ala Val His Val Lys Asp Ala Gly Phe Tyr Val Cys Arg Val  
 180 185 190  
 Asn Asn Asn Phe Thr Phe Glu Phe Ser Gln Trp Ser Gln Leu Asp Val  
 195 200 205  
 Cys Asp Ile Pro Glu Ser Phe Gln Arg Ser Val Asp Gly Val Ser Glu  
 210 215 220  
 Ser Lys Leu Gln Ile Cys Val Glu Pro Thr Ser Gln Lys Leu Met Pro  
 225 230 235 240  
 Gly Ser Thr Leu Val Leu Gln Cys Val Ala Val Gly Ser Pro Ile Pro  
 245 250 255  
 His Tyr Gln Trp Phe Lys Asn Glu Leu Pro Leu Thr His Glu Thr Lys  
 260 265 270  
 Lys Leu Tyr Met Val Pro Tyr Ala Asp Leu Glu His Gln Gly Thr Tyr  
 275 280 285  
 Trp Cys His Val Tyr Asn Asp Arg Asp Ser Gln Asp Ser Lys Lys Val  
 290 295 300  
 Glu Ile Ile Ile Gly Arg Thr Asp Glu Ala Val Glu Cys Thr Glu Asp  
 305 310 315 320  
 Glu Leu Asn Asn Leu Gly His Pro Asp Asn Lys Glu Gln Thr Thr Asp  
 325 330 335  
 Gln Pro Leu Ala Lys Asp Lys Val Ala Leu Leu Ile Gly Asn Met Asn  
 340 345 350  
 Tyr Arg Glu His Pro Lys Leu Lys Ala Pro Leu Val Asp Val Tyr Glu  
 355 360 365  
 Leu Thr Asn Leu Leu Arg Gln Leu Asp Phe Lys Val Val Ser Leu Leu  
 370 375 380  
 Asp Leu Thr Glu Tyr Glu Met Arg Asn Ala Val Asp Glu Phe Leu Leu  
 385 390 395 400  
 Leu Leu Asp Lys Gly Val Tyr Gly Leu Leu Tyr Tyr Ala Gly His Gly  
 405 410 415  
 Tyr Glu Asn Phe Gly Asn Ser Phe Met Val Pro Val Asp Ala Pro Asn  
 420 425 430  
 Pro Tyr Arg Ser Glu Asn Cys Leu Cys Val Gln Asn Ile Leu Lys Leu  
 435 440 445  
 Met Gln Glu Lys Glu Thr Gly Leu Asn Val Phe Leu Leu Asp Met Cys  
 450 455 460  
 Arg Lys Arg Asn Asp Tyr Asp Asp Thr Ile Pro Ile Leu Asp Ala Leu  
 465 470 475 480  
 Lys Val Thr Ala Asn Ile Val Phe Gly Tyr Ala Thr Cys Gln Gly Ala  
 485 490 495  
 Glu Ala Phe Glu Ile Gln His Ser Gly Leu Ala Asn Gly Ile Phe Met  
 500 505 510  
 Lys Phe Leu Lys Asp Arg Leu Leu Glu Asp Lys Lys Ile Thr Val Leu  
 515 520 525  
 Leu Asp Glu Val Ala Glu Asp Met Gly Lys Cys His Leu Thr Lys Gly  
 530 535 540  
 Lys Gln Ala Leu Glu Ile Arg Ser Ser Leu Ser Glu Lys Arg Ala Leu  
 545 550 555 560  
 Thr Asp Pro Ile Gln Gly Thr Glu Tyr Ser Ala Glu Ser Leu Val Arg  
 565 570 575  
 Asn Leu Gln Trp Ala Lys Ala His Glu Leu Pro Glu Ser Met Cys Leu  
 580 585 590  
 Lys Phe Asp Cys Gly Val Gln Ile Gln Leu Gly Phe Ala Ala Glu Phe

595 600 605  
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu  
 610 615 620  
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp  
 625 630 635 640  
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser  
 645 650 655  
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu  
 660 665 670  
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu  
 675 680 685  
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu  
 690 695 700  
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly  
 705 710 715 720  
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro  
 725 730 735  
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser  
 740 745 750  
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro  
 755 760 765  
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp  
 770 775 780  
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg  
 785 790 795 800  
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser  
 805 810 815  
 Asp Arg Leu Arg Ile Ser Glu Lys  
 820

<210> 1581  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1581  
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 120  
 ggatacccg atgtgccccg ttcgaaggag aagttcgagt ccactaccc gggtgacttc  
 180  
 atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc  
 240  
 ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag  
 300  
 gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gctcatggat  
 360  
 tcccacgggtg ccgacgcgct gcgttggttc atggcgccg acggctcccc atggagtga  
 420  
 cgacgc  
 426

<210> 1582

<211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1582  
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly  
 1 5 10 15  
 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser  
 20 25 30  
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser  
 35 40 45  
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala  
 50 55 60  
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr  
 65 70 75 80  
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His  
 85 90 95  
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile  
 100 105 110  
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg  
 115 120 125  
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg  
 130 135 140

<210> 1583  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

<400> 1583  
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 60  
 ggggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct  
 120  
 cctaagggaa taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg  
 180  
 gaaatgggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg  
 240  
 gggttcaggca gttacacaga ttacaggaat ggttttaggca gttctggaaa aatcagttca  
 300  
 ggggatgagg cagggtataa gaatgtttta ggggggttctg ggaggaatcc attagggagc  
 360  
 gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgtcatg gaatgaggca  
 420  
 gggttctaggc aaggcttttg gggaaactagt  
 450

<210> 1584  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 1584  
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

```

      1           5           10           15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala
      20           25           30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser
      35           40           45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser
      50           55           60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met
      65           70           75           80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly
      85           90           95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly
      100          105          110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu
      115          120          125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln
      130          135          140
Gly Phe Gly Gly Thr Ser
      145          150

```

&lt;210&gt; 1585

&lt;211&gt; 596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1585

```

tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga
60
tctaataccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
120
ggcagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg
180
gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaacactgg
240
tttagaaata cgctttttta ggaacgacag agaaataaag attcaccata caacttcagt
300
aaccttctta taacggtttt agaagatatt agaattgatt cacagcccac ctctttagaa
360
cattacaaat ctgatgcatt attcagtaaa aggtcttcta gaacgagatt tactgactac
420
cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata
480
gaacaactct ccaactgttct caatctgcct acccgggtta ttgttgatg gttccagaat
540
gctcgtcaga aagcacgaaa gagttatgag aatcaagcag aaaccccttc acgcgt
596

```

&lt;210&gt; 1586

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1586

Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100          105          110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115          120          125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130          135

```

&lt;210&gt; 1587

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1587

```

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggctttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tgttcccgcac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcggtgctcc tgacagctca gacccagac cgcaggtgct cccgacagct cagaccccag
300
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360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcggtgctcc cgacagctca
420
gacccagac cgcggtgct cctgacagct cagaccccag accgcgggtg ctctgacag
480
ctcagacccc agaccgcgcg t
501

```

&lt;210&gt; 1588

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1588

```

Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
      1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```



```

          35          40          45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
    50          55          60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65          70          75          80
Pro Asp Arg Gly Cys Ser
          85

```

<210> 1589  
 <211> 407  
 <212> DNA  
 <213> Homo\*sapiens

```

<400> 1589
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60
tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
120
tgcctactcg ttgctgacca ccaagagggc gggcgtggac gggtcacgcg cagttggcag
180
gatgtccccc gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgcag
240
gactggggct ggctgtcgat ggttgcgggg ctcgctgttg tcaaggatcat caaggaggtc
300
ggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
407

```

<210> 1590  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1590
Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
1          5          10          15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
20          25          30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
35          40          45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
50          55          60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
65          70          75          80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
85          90          95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
100          105          110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
115          120          125
Cys Gly Ile Leu Ser Glu Arg
130          135

```

<210> 1591  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<400> 1591  
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 60  
 ttcagagagg cacttgcacc tagaggagtc tctgggaagc agatggggat atgggacaga  
 120  
 cgcattcttga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc  
 180  
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgtcgt ccctgcacag  
 240  
 aacgtccagc gagtcctgac tttccagccg ctgcgcttca tccaggagca cgtcctgac  
 300  
 cctgtctttg acctcagcgg ccccagcagt ctggcccagc ctgtccagta ctcccttgac  
 360  
 tgtgggatcc ctggctgctc acgcccctga ggaccctcg gatctgctcc agcacgtgaa  
 420  
 attt  
 424

<210> 1592  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1592  
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser  
 1 5 10 15  
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr  
 20 25 30  
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val  
 35 40 45  
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val  
 50 55 60  
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro  
 65 70 75 80  
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro  
 85 90 95

<210> 1593  
 <211> 1678  
 <212> DNA  
 <213> Homo sapiens

<400> 1593  
 cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg  
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 atgagaaatg agccattga aggcaaacctc tcaactgtata ggcaacaggc atctatcatt  
 120  
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc  
 180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt  
240  
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc  
300  
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact  
360  
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag  
420  
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg  
480  
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa  
540  
aaactgtatt catttggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta  
600  
cgacagttgc gtcaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag  
660  
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga  
720  
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt  
780  
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct  
840  
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa  
900  
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaag tcatggtcca  
960  
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag  
1020  
tgctttctga aacaacaaag ccaaacttcc attggtcagg taattcagga ggggtggggag  
1080  
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc  
1140  
tataagccta atctcataat gtatttcttt ttgaaactg atttgtttag cattttgttt  
1200  
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt  
1260  
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagttag acatcactgg  
1320  
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg  
1380  
tccattaaga aacatgtagt ttttttttag aatgtaataa ccagtggtt tactgttttt  
1440  
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg  
1500  
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc  
1560  
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta  
1620  
aaggcaaata aacttggtac gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa  
1678

&lt;210&gt; 1594

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1594

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Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1           5           10           15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20           25           30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35           40           45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50           55           60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65           70           75           80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85           90           95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
 100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
 115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
 130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
 145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
 165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
 180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
 195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
 210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
 225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
 245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
 260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
 275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
 290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
 305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
 325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
 340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
 355          360          365

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&lt;210&gt; 1595

&lt;211&gt; 559

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1595

accggtcccg ctcacaggcc cacacctgct tctcctcctg gggcagggca gcctgggtggg  
 60  
 gcatggcccg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact  
 120  
 ggtgctgggg cccagccagg gagagcatct tcccgtctggg accttccccc gggcggtca  
 180  
 tcccttgag atgtagggtg cagctgagat ggtggcgggc ccattcctgc tgttcgccag  
 240  
 cctgggctgg ggggtactagg atcacccttg ggtgatgag gagcccggt cttgggcagt  
 300  
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgcgccagg  
 360  
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc  
 420  
 tctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc  
 480  
 cagcttgag agccagcatc aaggtcaggc ctcacttgcc caagaaagag gagtgaggag  
 540  
 gccactgga ggaacgcgt  
 559

&lt;210&gt; 1596

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1596

Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu  
 1 5 10 15  
 Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu  
 20 25 30  
 Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp  
 35 40 45  
 Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro  
 50 55 60  
 Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile  
 65 70 75 80  
 Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Gln Glu Trp Gly Arg His  
 85 90 95  
 His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu  
 100 105 110  
 Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys  
 115 120 125  
 Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro  
 130 135 140  
 Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp  
 145 150 155 160  
 Ala Cys Glu Arg Asp Arg  
 165

&lt;210&gt; 1597

&lt;211&gt; 609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta  
 60  
 ccgggtgggtt ccgggtgggtg ttcagcagct agcttggtt cctttcaggg cccgttggt  
 120  
 ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg  
 180  
 atcaagccga cctacggttc gacctcccga tacggcggtta tcgctatggc ttcattcttg  
 240  
 gatactcctg ggccctgcgc cgtaccgtc cttgacgccg cgttgctcca tcaggccatt  
 300  
 gccggtcacg acgctatgga ccagaccacg attaatcagc ccaccccggc ggtcgttgag  
 360  
 gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg  
 420  
 cagggttacg accctcaggt cgaggcccgg ttccacgagg ctgtcgagat gctaatagag  
 480  
 gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctgcctt acctgcttat  
 540  
 taccttattc agcctgccga ggtgtctagc aacctgggtc gttacgacgc catgcgttac  
 600  
 ggcttacgc  
 609

&lt;210&gt; 1598

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35					40					45			
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50					55					60				
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65					70					75				80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
				85				90						95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
			100					105					110		
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145					150					155				160	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

165 170 175  
 Leu Pro Ala Tyr Tyr Leu Ile Gln Pro Ala Glu Val Ser Ser Asn Leu  
 180 185 190  
 Ala Arg Tyr Asp Ala Met Arg Tyr Gly Leu Arg  
 195 200

<210> 1599  
 <211> 526  
 <212> DNA  
 <213> Homo sapiens

<400> 1599  
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 cggcacctgc acgtgtggtt tctctgcttt tgttggggag cgtgcgtcgc gacctggatt  
 120  
 agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg gggtgatcca  
 180  
 gcatcggggc ccgggtccggc agtgtattcg gctccctttg ttgaggaatc atgcaaggcg  
 240  
 cttgtgcttt tcgcgctggc catcggcatg gggcgacgga tgacctcggg agttcagacg  
 300  
 gtgagcatgg ccgggctctc ggcaattggt ttcgcctttg ttgagaacat tatgtactac  
 360  
 gcccgtagc ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcgtt  
 420  
 gatgaagttg gtgctgttgc ggggagtgtg tgccctgctt gggcatccgc tgttcaccag  
 480  
 catgacgggt atcgggtctgg cccttgggct gaggtcacga agttga  
 526

<210> 1600  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1600  
 Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly  
 1 5 10 15  
 Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe  
 20 25 30  
 Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly  
 35 40 45  
 Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly  
 50 55 60  
 Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala  
 65 70 75 80  
 Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys  
 85 90 95  
 Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val  
 100 105 110  
 Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp  
 115 120 125  
 Ala Glu Val Thr Lys Leu

130

<210> 1601  
 <211> 447  
 <212> DNA  
 <213> Homo sapiens

<400> 1601  
 gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc  
 60  
 atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg  
 120  
 ttcttccccg ggcgaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg  
 180  
 ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc  
 240  
 gccaccgtcg gaatcttgct tcaggagccc ccgctcaccg aggacaaaac tgttcgcgag  
 300  
 aacgtcgaag aggccgtcgg cgacatcaaa gccaaagctgg cacggttcga ggaagtctcc  
 360  
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 420  
 cagaccgagc tcgataacgc caacgcg  
 447

<210> 1602  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1602  
 Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly  
 1 5 10 15  
 Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala  
 20 25 30  
 Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu  
 35 40 45  
 Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu  
 50 55 60  
 Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr  
 65 70 75 80  
 Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile  
 85 90 95  
 Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn  
 100 105 110  
 Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln  
 115 120 125  
 Thr Glu Leu Asp Asn Ala Asn Ala  
 130 135

<210> 1603  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens



<400> 1603  
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 gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg  
 120  
 cacggggttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg  
 180  
 catcaagtcg cgttggttggc cgggatggtc aagggcccggt cctattacaa cccgcggcgc  
 240  
 aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggg  
 300  
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc  
 360  
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaacg ccagttgcgt  
 420  
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac  
 480  
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc  
 540

<210> 1604  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 1604  
 Thr Arg Lys Leu Thr Glu Ala Met Met Ala Met Leu Leu Glu Leu His  
 1 5 10 15  
 Tyr Ser Lys Gln Glu Ile Leu Glu Ala Tyr Leu Asn Glu Val Phe Val  
 20 25 30  
 Gly Gln Asp Gly Gln Arg Ala Val His Gly Phe Gly Leu Ala Ser Gln  
 35 40 45  
 Phe Phe Phe Gly Gln Pro Leu Ser Glu Leu Lys Leu His Gln Val Ala  
 50 55 60  
 Leu Leu Val Gly Met Val Lys Gly Pro Ser Tyr Tyr Asn Pro Arg Arg  
 65 70 75 80  
 Asn Pro Glu Arg Ala Leu Glu Arg Arg Asn Leu Val Leu Asp Val Leu  
 85 90 95  
 Glu Gln Gln Gly Val Ala Thr Ala Glu Gln Val Ala Ala Ala Lys Lys  
 100 105 110  
 Met Pro Leu Gly Val Thr Thr Arg Gly Lys Leu Ala Asp Ser Ser Phe  
 115 120 125  
 Pro Gly Phe Ile Asp Leu Val Lys Arg Gln Leu Arg Glu Asp Tyr Arg  
 130 135 140  
 Asp Glu Asp Leu Thr Glu Glu Gly Leu Arg Ile Phe Thr Ser Phe Asp  
 145 150 155 160  
 Pro Ile Leu Gln Met Lys Ala Glu Ala Ser Val Asn Asp Thr Phe Lys  
 165 170 175  
 Arg Leu Thr Gly  
 180

<210> 1605  
 <211> 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1605

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 60  
 cattctttgc gggcggggac tgcactggga tattgcggcc catcgctgt gaccacacat  
 120  
 cgcagcgtg gaccaccag cccacctggc cccactcgca cgtgccagta ctgtccgcac  
 180  
 gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac  
 240  
 ccagcgtac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca  
 300  
 tctttctcct tcacaaagta tttggtaatt gtcacttagc tttatcgctc ggaatctgtg  
 360  
 aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatagcac tcccgggcca  
 420  
 aatgttg  
 427

&lt;210&gt; 1606

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1606

Met	Thr	Ala	Ser	Ile	Arg	Gly	Arg	Val	Leu	Ser	Val	Ile	Met	Ala	Val
1				5				10					15		
Ala	Val	Ala	Leu	Gly	Leu	Ala	Val	Val	Ala	Gly	Gly	Thr	Gln	Gln	Ala
			20					25					30		
His	Ala	Ala	His	Arg	Asp	Phe	Leu	Arg	Ala	Asp	Ser	Thr	Gly	Thr	Cys
			35				40					45			
Glu	Trp	Asp	Gln	Val	Gly	Trp	Trp	Val	Gln	Arg	Cys	Asp	Val	Trp	Ser
	50					55					60				
Gln	Ala	Met	Gly	Arg	Asn	Ile	Pro	Val	Gln	Ile	Pro	Pro	Ala	Lys	Asn
					70					75				80	
Gly	Gly	Asn	Ala	Gly	Leu	Tyr	Leu	Leu	Asp	Gly	Leu	Arg	Ala	Thr	Asp
				85					90					95	
Arg	Thr	Asn	Ala												
															100

&lt;210&gt; 1607

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1607

gcacggctcc gctcggggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt  
 60  
 tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtaaa  
 120  
 cggatgggac tgatcccgta cgaggcgatc gtggggcgga cgatgatgat cgtggcgacg  
 180

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,  
 240  
 tttctgttgg cacccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg  
 300  
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg  
 360  
 gacggaggcg aaggcacggg gcagtcgctg gtcgac  
 396

<210> 1608  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 1608  
 Thr Gly Lys Pro Phe Leu Leu Ala Pro Asp Ser Phe Lys Glu Ser Met  
 1 5 10 15  
 Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val  
 20 25 30  
 Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu  
 35 40 45  
 Gly Thr Val Gln Ser Leu Val Asp  
 50 55

<210> 1609  
 <211> 505  
 <212> DNA  
 <213> Homo sapiens

<400> 1609  
 acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg  
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 ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac  
 120  
 gcggccccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gctcatgagg  
 180  
 ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg  
 240  
 gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt  
 300  
 gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggctcga gacggggaat  
 360  
 ggggtgaatt ggacgggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat  
 420  
 gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat  
 480  
 ggagcgagaa aaagcgggcg tcgac  
 505

<210> 1610  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1610

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Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1          5          10          15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
 20          25          30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
 35          40          45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
 50          55          60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
 65          70          75          80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
 85          90          95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
115          120          125
Met

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&lt;210&gt; 1611

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
60
aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtattaggt
120
agaatgttcg atggatttga attccgtggt ttttcacaac aagctggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttgtag atggacgtaa taatattgag cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggt gggttcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

&lt;210&gt; 1612

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1          5          10          15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```

```

                20                25                30
Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
      35                40                45
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
      50                55                60
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
      65                70                75                80
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
      85                90                95
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
      100                105                110
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
      115                120                125
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
      130                135                140
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
      145                150                155                160
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
      165                170                175
Thr

```

<210> 1613  
 <211> 584  
 <212> DNA  
 <213> Homo sapiens

<400> 1613  
 nnacgcgttc agccgagaaa tatgctgctt tttgcctgcc acctcacaaa tgctacggca  
 60  
 cagggcgctc aggttttgcg cctcctggta cgttgctaca cacttgctca cctccagcg  
 120  
 gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca  
 180  
 tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc  
 240  
 tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataatgtgcg tatgcctggc  
 300  
 acggtaaagt gtcgcgggct ttagatgcg tgtgaacgtt ttcgtgactt gaagaggctc  
 360  
 aagctgatgt gttcgcgtga gctcgatgca gcgcgtgcg ttgctgcct tgggtcgat  
 420  
 cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca  
 480  
 gtggcgagg cgatgagttc ctcatctgcg tctttctcga ggtcttggtc catgtccata  
 540  
 aacataccaa agctggatgg gtcatacgac ggcgagcat gcat  
 584

<210> 1614  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1614

```

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1           5           10           15
Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Val Arg Cys
 20           25           30
Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35           40           45
Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50           55           60
Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65           70           75           80
Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85           90           95
Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100          105          110
Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115          120          125
Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130          135          140
Pro Ile Glu Cys Gly Val Val Phe Ser
145          150

```

&lt;210&gt; 1615

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1615

```

gccggcttgcc cgcagcgctc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
60
tcgggtgcttg tcagtgtctg tgatcatcatt tccctgcttg gggctctact ggcttggatc
120
ctactgtgctg gtgagacgat gcaggtgccc ggtgaggacg gcaccatgcc gaaactgttc
180
ggacggatca acaaactga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
240
cagatatgcc ttgtcatgac ggtgttgttg gacggtgctt acttggcgat ggcgaccctg
300
gctgccgccc tcctcctggt gccgtacctg ctgtcagccg cattcgccct gaagatgggtg
360
atc
363

```

&lt;210&gt; 1616

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1616

```

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1           5           10           15
Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20           25           30
Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

```

      35              40              45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
      50              55              60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
65              70              75              80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85              90              95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100              105              110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115              120

```

&lt;210&gt; 1617

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1617

```

accggtgact acctgtggga gaagaagggc atcggtccca tcctcaagat tgataagggc
60
ctggtgacg agggctgccg cggtcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaaccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccg
360
ctcgacgccg agatcatgtt gaagctgacg atcccagatt ccgaagacct gtatgccgac
420
ctcattgagg atccgaaggt cctacgc
447

```

&lt;210&gt; 1618

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1618

```

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1      5      10      15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
      20      25      30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
      35      40      45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
      50      55      60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
65      70      75      80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
      85      90      95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

100 105 110  
 Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys  
 115 120 125  
 Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp  
 130 135 140  
 Pro Lys Val Leu Arg  
 145

<210> 1619  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<400> 1619  
 nnggtaccga aaccggtgct gctaccgcat aaaatcaaag gaactagtat gcataacgta  
 60  
 acaacaaatg gtgcctccat tcccgccctt ggccttggca ctttccgtat gcccggcgaa  
 120  
 gatgtgcttc gcatcgctcc ttacgcgctc aaggctgggt ttcgccatgt cgataccgcg  
 180  
 cagatttatg gcaatgaagt cgaggctcggg gaagcaattg cgacttccgg cgttcagcgt  
 240  
 ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc  
 300  
 gcatctgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc  
 355

<210> 1620  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<400> 1620  
 Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser  
 1 5 10 15  
 Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu  
 20 25 30  
 Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr  
 35 40 45  
 Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly  
 50 55 60  
 Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg  
 65 70 75 80  
 Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His  
 85 90 95  
 Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr  
 100 105 110  
 Asp Tyr Val Asp Leu Leu  
 115

<210> 1621  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1621

gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaagtg aagcgggtccg  
60  
gctgggggtcg gcgggacccg cgggccatgt acggcgacat attcaacgcc acggggcggg  
120  
ccccgaggc ggcggtaggc agcgcgctgg ccccgaggagc cacgggtcaag gcagaaggcg  
180  
ctttgccgct ggagctggcc actgcgcgcg gtatgagggc cggcgcgggc acaaagcccc  
240  
acctgcccac ctacctgctg ctcttcttcc tgctgctgct ctcggggggcg ctcggcgggc  
300  
tcttcatcgg ttgccagctg cgccattcgg ccttcgccgc gctgcccac gaccgcttcg  
360  
ctcgcgacgc ccgcgcgcc ggaagg  
386

&lt;210&gt; 1622

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1622

Met	Glu	Ala	Pro	Arg	Val	Ala	Pro	Gly	Cys	Ser	Arg	Pro	Ser	Glu	Ala
1				5				10					15		
Val	Arg	Leu	Gly	Ser	Ala	Gly	Pro	Ala	Gly	His	Val	Arg	Arg	His	Ile
		20						25				30			
Gln	Arg	His	Gly	Ala	Gly	Pro	Arg	Gly	Gly	Arg	Gln	Arg	Ala	Gly	
		35					40				45				
Pro	Arg	Ser	His	Gly	Gln	Gly	Arg	Arg	Arg	Phe	Ala	Ala	Gly	Ala	Gly
		50				55				60					
His	Cys	Ala	Arg	Tyr	Glu	Gly	Arg	Arg	Gly	His	Lys	Ala	Arg	Pro	Ala
65					70					75				80	
His	Leu	Pro	Ala	Ala	Leu	Leu	Pro	Ala	Ala	Ala	Leu	Gly	Gly	Ala	Arg
			85					90					95		
Arg	Pro	Leu	His	Arg	Leu	Pro	Ala	Ala	Pro	Phe	Gly	Leu	Arg	Arg	Ala
		100					105						110		
Ala	Pro	Arg	Pro	Leu	Arg	Ser	Arg	Arg	Pro	Arg	Ala	Arg	Lys		
		115					120					125			

&lt;210&gt; 1623

&lt;211&gt; 314

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1623

nctggtgccc agagcctcgt cgggggtccag ccccgaggcc tttgcgagtc agacacttgg  
60  
ggcccttgct tgtggttttt ctgggagctt tgggccgagg gttccccgga cccttcctg  
120  
aacttttccg cagtttcaga ggagagtctg caagtgagag ctgcagtgac tgtgccttgt  
180  
gcttggcacc caagcagggc atgggagtct taagtggaac cagggcctca aggacaacag  
240

agagccgcat ggcagggtag acacctggat aaaagtgggt gggggaagcc cactgctgca  
 300  
 ccccgggcat tgct  
 314

<210> 1624  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1624  
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly  
 1 5 10 15  
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro  
 20 25 30  
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser  
 35 40 45  
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser  
 50 55 60  
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr  
 65 70 75 80  
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro  
 85 90 95  
 Arg Arg Gly Ser Gly His Gln  
 100

<210> 1625  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<400> 1625  
 acgcgtactc agcagcaagt tctgctgagc cccaaatcca cacagactga gcctggacca  
 60  
 gggctgggcc ctccttatcc aagccaatcc agggaaacac tgtgctgact tcaaggcaga  
 120  
 agggacaaga aagcatgact gtgcacaaat tggctttgca gccatctcca ccaggtagcc  
 180  
 ctgggagcac ctgggaagaa gccgggccat gcaggagacc caacctcacc ctgcattcag  
 240  
 aaccgggcct tggaatggcc tgatctgagc cctagcacc ctgggaagcc gccaccttt  
 300  
 cttctggcct ctgggaagaa gatgggaatt ttaaggccat gggagaagac actcctggat  
 360  
 tctttcagct tctccacca cccctgctc cagatgtaat ctgggaagac tggggagtca  
 420  
 ggggcacagt gagttggagc aggggattgg agggtttgtg ggacagcctt ccagggcacc  
 480  
 tcaggagctg aattatttaa gccagctgcc cgtgggcccc gctcccagcc cttcctgttt  
 540  
 acacagactc cgtccatagc agacaccttc ccagagcctg ggtgacaata ggctgggtgt  
 600  
 gttttctgca atcttatag  
 619

<210> 1626  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1626  
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg  
 1 5 10 15  
 Ala Ala Gly Leu Asn Asn Ser Ala Pro Glu Val Pro Trp Lys Ala Val  
 20 25 30  
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser  
 35 40 45  
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu  
 50 55 60  
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe  
 65 70 75 80  
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly  
 85 90 95  
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe  
 100 105

<210> 1627  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 1627  
 naccggtgcg ttgtgcccacat gccttgctga acaaggccat ataggccgta ccgacgtgag  
 60  
 gatcaccagt gggcgagggg gcaacgcgcg tgcgcgcggg atgcaaata gtcgatgatga  
 120  
 cacgaagtct atcgggatcc gctgacagac tccggtaaag ttcccgccat ggcagaacct  
 180  
 actggaaacc cggctgagtc cagctcggac ttcattcatc aggttggttcg cgcggacatc  
 240  
 caacaggaca cctacggcgg gcgcgtccag acccggttcc cacctgagcc taacggctac  
 300  
 ctccacattg gccacgcgaa ggccatcgtc accgatttcg gcgttgccga ggatttcggc  
 360  
 ggcacctgca acctgagact tgatgataact aatccaggca ccgaggaaac cgagtatgtc  
 420  
 gagtcgatcg ttgcagacat tgagtgggta ggttactccc cggccacgt tgtccacgcg  
 480  
 t  
 481

<210> 1628  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1628  
 Met Ala Glu Pro Thr Gly Asn Pro Ala Glu Ser Ser Ser Asp Phe Ile

1	5	10	15
His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg			
20	25	30	
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly			
35	40	45	
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly			
50	55	60	
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu			
65	70	75	80
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr			
85	90	95	
Ser Pro Ala His Val Val His Ala			
100			

&lt;210&gt; 1629

&lt;211&gt; 4519

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1629

```

ccaaattgct gggaaatgtcc aaagtgtctac caggaggaca gctcggagaa agcccagaag
60
cggaaaatgg aagagagtga cgaagaagct gtgcaagcca aagtcttgcg gcccttgcgg
120
agctgcgatg agcctctcac gccccgcct cattcaccca cttccatgct gcagctcatc
180
catgaccggg tttcccccg gggatatggtg actcggtcat cccctggggc tggccccagc
240
gaccaccaca gtgccagccg cgatgagcgc ttcaaacggc ggcagttgct gcggtgcag
300
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420
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480
gccaaccttc gccattcccc ccgtgtgcta gtgcagcact gccagcccc aacccccag
540
cgtgggggatg aggaggggct ggggggagag gaggaggaag aggaggagga ggaggaggaa
600
gatgacagtg cagaggaggg ggggtgcagcc aggctgaatg gccggggcag ttgggctcag
660
gatggagacg aaagctggat gcagcgggag gtctggatgt ctgtcttcg ctacctcagc
720
cgcagagaac tttgtgaatg tatgcgagtg tgcaagacgt ggtataaatg gtgctgcgac
780
aagagacttt ggacaaaaat tgacttgagt aggtgtaagg ccattgtgcc ccaggccctc
840
agtggcatca tcaagaggca gccagtcagc cttgacctca gttggaccaa catctctaaa
900
aagcaactga catggctcgt caataggctg ccaggactga aagacctcct cctagcaggc
960
tgctcctggt ctgcagtctc tgccctcagc acctccagct gcccccttct caggaccctt
1020

```

gatcttcggt gggcagtagg aatcaaggac cctcaaattc gggacttget tactccaccg  
1080  
gctgataaac caggtcagga caatcgcagc aagctccgga acatgaccga cttccggctg  
1140  
gcaggccttg acatcacaga tgccacgctt cgcctcataa ttcgccacat gcccctcctg  
1200  
tctcgactcg acctcagtca ctgcagccac cttacagatc agtcctccaa tctactcact  
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1320  
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1440  
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1500  
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1560  
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1620  
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1680  
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1740  
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1980  
cagcagcccc aggagtccca gaccctgccc gatcacactg gtgctgttga gatctcccaa  
2040  
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2100  
gcactcgtgc ttgttcacat aattagggtt cccaccccag cctaccggac ttacttgcta  
2160  
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2220  
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2280  
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2340  
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2400  
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2460  
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2520  
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2580  
cagccatgga agggggtgtg cacgtgcctc tgtgtgtgtg gctgagtgtt ttctgcgctg  
2640

gtgtgtggag ggagggaggg aggggagcat ggtgtctccc gctccaccgc cctttgttga  
2700  
gccccatcag ctgccccctt ttactttgca ttgaacggcc tgtccaaaga tcctctctct  
2760  
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2820  
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2880  
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2940  
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3120  
gcaccttgcc cacttccaaa gcaatagagg cagagtggtc ccctctttgc cacctaggcc  
3180  
agttttgacc ctggcattaa ctggccttag aagaaactgg atcctggtag ggggtggcat  
3240  
tttgtttgtt tcttccaatc tgctgaatct ttgactgca cttacaaac agcagtctgc  
3300  
tcccatgacc ctctgccac ttccattggc ctccaggccc caataatctg gggttgaaac  
3360  
tttgaggaaa tgccagtgc ttattccaga gtgcctcagt taggggaact tctctgtaaa  
3420  
gaacctggg tattgagcaa aaaccttatt atcgtaatg acctataatt ggaagcttcc  
3480  
tgccttttcc tttggttgct cctgtggaaa atactgaaaa gattactttg tttattttg  
3540  
ttgtcttttt ataaaagggg aggtggagag accccttcag agcagggatt gtgccgggag  
3600  
agtgcctctg actttgggac atttcatcca cagaaatttc caagccaatg gtttcttttg  
3660  
ggttttggtt tttatgtttg ttttttgggg tttggaaaa catgcatttt taccgtgcac  
3720  
gtaaattggt cagcagaaaa gggagcccag aaaaggcagc agatggacca tgccttgct  
3780  
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3840  
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3900  
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4140  
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4260

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 4380  
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 4519

<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
			35				40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
				85					90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115				120						125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145					150					155				160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
				165					170					175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200					205			
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225					230					235				240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
				245					250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
			260					265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290                      295                      300  
 Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly  
 305                      310                      315                      320  
 Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu  
                     325                      330                      335  
 Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln  
                     340                      345                      350  
 Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn  
                     355                      360                      365  
 Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp  
                     370                      375                      380  
 Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu  
 385                      390                      395                      400  
 Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser  
                     405                      410                      415  
 Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu  
                     420                      425                      430  
 Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr  
                     435                      440                      445  
 Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys  
                     450                      455                      460  
 Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile  
 465                      470                      475                      480  
 Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser  
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&lt;210&gt; 1631

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1631

acgcgtgctc agccaagcct tagatgaaaa tgcgcttgct gacttttgtg cgatgcaatg  
 60  
 tcagaaccgc aacacacgtg cttcagacat ggcgggatgg aagacacttc agactctttt  
 120  
 ccatgttgac tctcgcgacg agcttgttga gttgcttggc ttttcgaaag acgacattac  
 180  
 caaccaagtt cagcaagctg tgggcgcctt ggggtttaccg ccactagaag atgaaaacgc  
 240  
 acaaggtgaa gatccggcgt cgcaggtccc gccagtcacc gacgaggacc ccaactgcttt  
 300  
 cttcgatcaa gttccagatg tgcctctaga  
 330

&lt;210&gt; 1632

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1632

Met Gln Cys Gln Asn Pro Asn Thr Arg Ala Ser Asp Met Ala Gly Trp  
 1                      5                      10                      15  
 Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val





aagatggcgg ctcacatctgtc ctacggccga gtgaacctaa acgtgttgcg cgaggcgggtg  
120  
cgctgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat  
180  
gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa  
240  
gtggaaaaaa tggtcacact taaaggaaat cgtttgccgg cagctgatgt gaagaatata  
300  
atTTTTTTtg tcagaccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt  
360  
gaagatagac gaggcccaac gagagatttt catattctgt ttgtgccacg ccgtagcctg  
420  
ttgtgcgaac agcggttgaa ggatctgggt gtcttgggat cctttattca caggaggag  
480  
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540  
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600  
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660  
cgggtgagaa ccggtgctt tgtggtggta aaggagggcc cttcacacc caaaaggag  
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792

<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
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Glu	Ala	Val	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly	
			20				25					30			
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
			35				40					45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
			50				55				60				
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65					70					75				80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85						90					95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
			100					105					110		
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
			115				120					125			
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
			130				135				140				
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145					150					155				160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

165 170 175  
 Lys Gly Leu Met Thr Leu Gln Ala Leu Tyr Gly Thr Ile Pro Gln Ile  
 180 185 190  
 Phe Gly Lys Gly Glu Cys Ala Arg Val Arg Thr Gly Cys Phe Val Val  
 195 200 205  
 Val Lys Glu Gly Pro Ser His Pro Lys Arg Glu Glu Glu Arg Glu Ala  
 210 215 220  
 Pro Tyr Lys Gln Ile Gln Leu Ile Leu Ile Tyr Glu Tyr Cys Thr  
 225 230 235 240  
 His Glu Phe

<210> 1637  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 1637  
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 180  
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 240  
 ttggcgctca ccccgagca actgtcggcg atccgcaact cagntnnaat ggttgtgttc  
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 357

<210> 1638  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1638  
 Xaa Met Met Thr Gln Thr Pro Ala His Pro Gly Leu Ile Ser Leu Gln  
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 Gly Ile Gly Lys Arg Tyr Gln Leu Ala Gly Gln Lys Leu Ser Ile Leu  
 20 25 30  
 Asn Asp Val Cys Leu Ser Ile Ser Arg Gly Asp Ser Cys Gly Ile Leu  
 35 40 45  
 Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Leu Asn Ile Leu Gly Leu  
 50 55 60  
 Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile  
 65 70 75 80  
 Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa  
 85 90 95  
 Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu  
 100 105 110  
 Asp Asn Val Ala Leu Pro Leu  
 115

<210> 1639  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 1639  
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 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga  
 120  
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat  
 180  
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa  
 240  
 cgctttgtaa catcggtatga ggcttgggat atgatgactt ctaagacgac tgcgttgtt  
 300  
 gtagatacac ataaacctga aatgggtctta gatgaaaatg tcttaaataa agcaaaccgc  
 360  
 aaagtagtca ttgatcatca tagacgtggc gaaact  
 396

<210> 1640  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1640  
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu  
 1 5 10 15  
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu  
 20 25 30  
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn  
 35 40 45  
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr  
 50 55 60  
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu  
 65 70 75 80  
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr  
 85 90 95  
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu  
 100 105 110  
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg  
 115 120 125  
 Arg Gly Glu Thr  
 130

<210> 1641  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 1641  
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tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg  
 120  
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttccacc  
 180  
 ttcattgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta  
 240  
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta  
 300  
 aactgtgcct cccctcactc atatgttgaa gtctaacc taactacctc agaatgggac  
 360  
 gttatttgga aaaaag  
 376

<210> 1642  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1642  
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly  
 1 5 10 15  
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro  
 20 25 30  
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly  
 35 40 45  
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr  
 50 55 60  
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro  
 65 70 75 80  
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Ser Glu Trp Asp Val  
 85 90 95  
 Ile Trp Lys Lys  
 100

<210> 1643  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<400> 1643  
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 gagtgtctga gagcaggtgc aggagaaggt gtgggtcca cctgggcctc tgaagccagg  
 120  
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 180  
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggtcc  
 240  
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc  
 300  
 cagccccatg ctcacagccc tataagtga cgatggcacc ctatatcattc taagcggggc  
 360  
 tggcctcct gaggttttag ggacaccaga atgagcccc ctcggcggag tctggctctg  
 420

gggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca  
 480  
 ccatcccccg tgtg  
 494

<210> 1644  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1644  
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro  
 1 5 10 15  
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys  
 20 25 30  
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly  
 35 40 45  
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro  
 50 55 60  
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser  
 65 70 75 80  
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val  
 85 90 95  
 Pro Met Glu Phe Trp Lys Leu  
 100

<210> 1645  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1645  
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 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag  
 120  
 accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg  
 180  
 cagtcactat ccgtggctga gtcgcggttg aagcaggggtg ccagcctcct gatccgggct  
 240  
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct  
 300  
 ggggccaaga tgctagccaa ggctctacgc  
 330

<210> 1646  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1646  
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val  
 1 5 10 15  
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

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      20      25      30
Asn Phe Asn Val Arg Cys Lys Glu Thr Leu Asp Asp Val Leu His Arg
      35      40      45
Ile Ala Gln Leu Met Gln Asp Asp Cys Pro Leu Gln Ser Leu Ser
      50      55      60
Val Ala Glu Ser Arg Leu Lys Gln Gly Ala Ser Ile Leu Ile Arg Ala
      65      70      75      80
Leu Gly Thr Asn Pro Lys Leu Thr Ala Leu Asp Ile Ser Gly Asn Ala
      85      90      95
Ile Gly Asp Ala Gly Ala Lys Met Leu Ala Lys Ala Leu Arg
      100      105      110

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<210> 1647  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

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<400> 1647
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120
cgcgactgcg cagggcgggg ccggccgaac catgggccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tcccatcgg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaaccc ggagctacct cctcagcgat
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gggacctgca agtgcggtct ggagtggtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

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<210> 1648  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

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<400> 1648
Met Asn Gly Gly Asn Glu Ser Ser Gly Ala Asp Arg Ala Gly Gly Pro
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Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
      20      25      30
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
      35      40      45
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
      50      55      60
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
      65      70      75      80
Pro Val Thr Pro

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<210> 1649  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<400> 1649  
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 120  
 gaagacttcc acgggatgga agaatgcac gatcagatcg ttctgtattt ccgccacgcc  
 180  
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt  
 240  
 aaatcgtccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccctt ctacgccatc  
 300  
 aagggctcgc cgggtcttcga gtcgcccctg gggttgttca acgccactga agacggcgcg  
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 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccctgg  
 420  
 gcgaccaagc gcctggccga a  
 441

<210> 1650  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1650  
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu  
 1 5 10 15  
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys  
 20 25 30  
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu  
 35 40 45  
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu  
 50 55 60  
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly  
 65 70 75 80  
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro  
 85 90 95  
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu  
 100 105 110  
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile  
 115 120 125  
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg  
 130 135 140  
 Leu Ala Glu  
 145

<210> 1651  
 <211> 408



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1651

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nccgcggatc cctccggcat cctggttatc gctccctcga aggaatccgg agcccgactg
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120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaaagc agaagacgga
240
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300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

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&lt;210&gt; 1652

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1652

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Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
1      5      10      15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
20     25     30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
35     40     45
Leu Arg Thr Ala Ala Glu Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
50     55     60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65     70     75     80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
85     90     95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
100    105    110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
115    120    125
Met Trp Ser Ala Ala Gly Glu Phe
130    135

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&lt;210&gt; 1653

&lt;211&gt; 398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1653

```

ccagcctctc tccgaccgcg tccttcttcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc  
 180  
 ggcattgacg tccagagcag cctgcttatt gctggtgctc agcatctgta cttgttgga  
 240  
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag  
 300  
 cgcgatgcct tgatcgtggc ggccggtgtc gcacaggtgg cacaagcag cacacccgtg  
 360  
 cagatatggc gctgggaaca gctccgactt tgtctaga  
 398

<210> 1654  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1654  
 Pro Ala Ser Leu Arg Pro Arg Pro Ser Ser Gly His Thr Ala Pro Asn  
 1 5 10 15  
 Val Ala Ser Pro Ser Pro Ala His Met Ala Ile Ala Pro Pro Asp Glu  
 20 25 30  
 Leu Ser Asp Lys Ile Arg Cys Ile Leu Arg Thr Leu Glu Pro Gly Asp  
 35 40 45  
 Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val  
 50 55 60  
 Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp  
 65 70 75 80  
 Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala  
 85 90 95  
 Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln  
 100 105 110  
 Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu  
 115 120 125  
 Arg Leu Cys Leu  
 130

<210> 1655  
 <211> 1115  
 <212> DNA  
 <213> Homo sapiens

<400> 1655  
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 120  
 ggagttctgg ataagctttt cggaaagcgg ctccctgcagg ctggtcgcta cctggtgtcc  
 180  
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca  
 240  
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc  
 300  
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc  
 360

gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag  
 420  
 gccgagtttg gcggggggcac ccgcggttc tcctgcgagg aggactttat ctatgagaat  
 480  
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg  
 540  
 ctgcagaatt tgcgtgcaa gcagggagaa gcactccaca acgtgcgctt cctggaggac  
 600  
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcagggtgtt cctgtccac  
 660  
 gacgagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag  
 720  
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgcctggctg  
 780  
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc  
 840  
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 900  
 atctggctga cgctgttctt ataggaatgg aagcgtatag gggctgagct gggatataat  
 960  
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcagggtgc  
 1020  
 gtgcgacgta tcatcccat cactcgggcc gaggagttct actaccgcc ctggaagcgg  
 1080  
 ctgctcttcc agctgcttgt tagcctccgc ctgtg  
 1115

&lt;210&gt; 1656

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1656

Met Ala Glu Ala Ala Ser Gly Ala Gly Gly Thr Ser Leu Glu Gly Glu  
 1 5 10 15  
 Arg Gly Lys Arg Pro Pro Pro Glu Gly Glu Pro Ala Ala Pro Ala Ser  
 20 25 30  
 Gly Val Leu Asp Lys Leu Phe Gly Lys Arg Leu Leu Gln Ala Gly Arg  
 35 40 45  
 Tyr Leu Val Ser His Lys Ala Trp Met Lys Thr Val Pro Thr Glu Asn  
 50 55 60  
 Cys Asp Val Leu Met Thr Phe Pro Asp Thr Thr Asp Asp His Thr Leu  
 65 70 75 80  
 Leu Trp Leu Leu Asn His Ile Arg Val Gly Ile Pro Glu Leu Ile Val  
 85 90 95  
 Gln Val Arg His His Arg His Thr Arg Ala Tyr Ala Phe Phe Val Thr  
 100 105 110  
 Ala Thr Tyr Glu Ser Leu Leu Arg Gly Ala Asp Glu Leu Gly Leu Arg  
 115 120 125  
 Lys Ala Val Lys Ala Glu Phe Gly Gly Gly Thr Arg Gly Phe Ser Cys  
 130 135 140  
 Glu Glu Asp Phe Ile Tyr Glu Asn Val Glu Ser Glu Leu Arg Phe Phe  
 145 150 155 160  
 Thr Ser Gln Glu Arg Gln Ser Ile Ile Arg Phe Trp Leu Gln Asn Leu

<400> 1658																
Met	Leu	Ala	Gly	Ala	Asp	Val	His	Ala	Arg	Val	Pro	Pro	Pro	Trp	Asn	
1				5					10					15		
Val	Ala	Ala	Gly	Val	Gly	His	Leu	His	Gly	Pro	Arg	Gly	Cys	Arg	Pro	
			20					25					30			
Ser	His	Ala	Glu	Ala	Ala	Gly	Ala	Pro	Leu	Pro	Gly	Ala	Val	Leu	Gly	
		35					40					45				
Glu	Val	Pro	Ala	Arg	Ala	Ala	Ala	Arg	Pro	Leu	Lys	Arg	Arg	Gly	Lys	
		50				55					60					
Pro	Ala	Gly	Ser	Lys	Asn	Cys	Leu	Gln	Arg	Leu	Thr	Asp	Cys	Val	Leu	
65				70						75				80		
Ser	Val	Leu	Thr	Pro	Arg	Leu	Arg	Ala	Gly	Pro	Gly	Gly	Arg	Gly	Arg	

85 90 95  
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu  
 100 105

<210> 1659  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<400> 1659  
 nnaagcttat ttgttattac taatattttc cgtgaccaga tgggccgcta tggtagagatt  
 60  
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgtttctc  
 120  
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt  
 180  
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc  
 240  
 tgtcccgact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttggggcgcc  
 300  
 tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg  
 360  
 gttgagttaa ccaacaatcg cn  
 382

<210> 1660  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 1660  
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg  
 1 5 10 15  
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg  
 20 25 30  
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe  
 35 40 45  
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu  
 50 55 60  
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu  
 65 70 75 80  
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala  
 85 90 95  
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp  
 100 105 110  
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg  
 115 120 125

<210> 1661  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgata  
 60  
 gctgcgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccgggtcc  
 120  
 gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc  
 180  
 tgagcacctg ctctcatca tcagggttca ggaccttgca ctgccgcagg taagggtgta  
 240  
 tgcgtgaggg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc  
 300  
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc  
 360  
 agtgctgaga gcgatgccgg ctctgcccc caccggggcc cagctccac tccttctcag  
 420  
 acgctggggc agggctctcg tcagggcac gagggggatc agcccaggcg catccaggag  
 480  
 aggtgcccag ctccgtgtcc catccacgc ttgatcgctg catg  
 524

&lt;210&gt; 1662

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25					30		
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
			35				40					45			
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
			50			55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65					70				75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85					90					95		
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
			100					105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
			115				120					125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
			130			135					140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145					150				155					160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
				165					170						

&lt;210&gt; 1663

&lt;211&gt; 321

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc  
 60  
 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag  
 120  
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg  
 180  
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggttaaggt cattggatcg  
 240  
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg  
 300  
 caagaggctt gcggatcagt c  
 321

&lt;210&gt; 1664

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
			20					25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35				40						45			
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50					55				60					
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70					75					80	
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90						95	
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

&lt;210&gt; 1665

&lt;211&gt; 431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc  
 60  
 ggcccgacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc  
 120  
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct  
 180  
 gcggcaacag atgacttttt agagtctgtt gatttgggtg tgctcgacgt caaatcggga  
 240  
 gatgaagaaa tctaccgtgc cctcaccggc agagcggtgc aacctaccat cgattttggt  
 300  
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggg tcgttggtgg ccccgatac  
 360  
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct  
 420

gtttcacgcg t  
431

<210> 1666  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 1666  
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg  
1 5 10 15  
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln  
20 25 30  
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile  
35 40 45  
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp  
50 55 60  
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly  
65 70 75 80  
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr  
85 90 95  
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile  
100 105 110  
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu  
115 120 125  
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg  
130 135 140

<210> 1667  
<211> 370  
<212> DNA  
<213> Homo sapiens

<400> 1667  
tccgctgaga ccagcgttgg tgacttccca ggtgagactg tccgcacat ggccaagatc  
60  
gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac  
120  
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag  
180  
ttcatcgtgg cctttaccaa gtccggtgac accgccgctc gtatcgctcg tctgcgtccg  
240  
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcttgggtc  
300  
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360  
gttaacgcgt  
370

<210> 1668  
<211> 123  
<212> PRT  
<213> Homo sapiens



&lt;400&gt; 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
      20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
      35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
      50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
      85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
      100          105          110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
      115          120

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&lt;210&gt; 1669

&lt;211&gt; 1491

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1669

```

ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tcccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaa
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtgga ctcgaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttggga tacgagttag ctccacttag cttcgtaaag
900

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attagaaatt tccatgaaac acttaccac atataaattc tgtgtaaagc tttatttttt  
 960  
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata  
 1020  
 taagggtttta catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc  
 1080  
 atgtttctgt gctacatgag tctagtgtcc tcatcttcca ttgtgacaac ccttctcccc  
 1140  
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat  
 1200  
 gctgtggttt ggttgactac atttgactac caccactgaa ggcgggcgac gtctgaagcg  
 1260  
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcc  
 1320  
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgac  
 1380  
 ttcgtaaggc acctcggctc ggcattcgga aaaccacccc atcttgccag agtcccttgg  
 1440  
 tccttgggta gcaaaagccg tatgcatct aaatcaagct ttcaatcatg a  
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1				5					10					15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
			20					25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
		35				40					45				
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50					55					60				
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70					75					80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
				85				90						95	
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
			100					105					110		
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
			115				120					125			
Cys	Ser	Val	Leu												
			130												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

gcgcgcggg gcgggaggac gccagtcgtc ttcccgccc tcaccacgac acgaccatta  
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tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcgga acccacggcg  
 120  
 gcaccccgca tgaagccggt gtcgcggggc ggggacacga ttttcgctgg cgcctcgctg  
 180  
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg  
 240  
 gcagccccga cgttggtggc taacaccgat aactttttca cgtccccggc ttggacaacg  
 300  
 gatcagaacc cgccggcctt tggatatccag gccctgctat ggacgacagt catctcatcc  
 360  
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag  
 420  
 ctcgcaccta gg  
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25				30			
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
	35						40				45				
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
50					55					60					
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65				70					75					80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85					90					95		
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
	100						105					110			
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
	115					120					125				
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
130					135						140				

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct  
 60  
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtâacccca  
 120  
 ggctcccagc gtcttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc  
 180  
 tctgctggcc ttcttcagg ggagttcatt gctgggggtg gccctgcagg gacctccact  
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg  
 300  
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac  
 360  
 gcagggttag tgctgggacc cagaaccagt caactggttt t  
 401

<210> 1674

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1674

Met	Ala	Leu	Tyr	Phe	Phe	Ile	His	Lys	Trp	Arg	Ile	Cys	Ile	Leu	Phe
1				5					10					15	
Ser	Gln	Ile	Leu	Pro	Ser	Pro	Cys	Cys	Ile	Leu	Leu	Leu	Pro	Leu	Pro
			20					25					30		
Ser	Thr	Val	Glu	Val	Pro	Ala	Gly	Pro	Pro	Pro	Ala	Met	Asn	Ser	Pro
		35					40					45			
Gly	Arg	Arg	Pro	Ala	Glu	Leu	Gln	Gly	Thr	Pro	Leu	Gln	Asp	Gln	Ala
	50					55					60				
Phe	Gly	Ser	Trp	Lys	Arg	Arg	Trp	Glu	Pro	Gly	Val	Thr	Glu	Gln	Thr
65					70				75					80	
Gly	Leu	Cys	Arg	Ala	Phe	Ile	Ser	Ser	Phe	Thr	Ala	Arg	Ser	Glu	Tyr
			85					90						95	
Ile	Lys	Thr	Gln	Arg	Pro	Trp	Gln	Thr	Pro	Gln	Arg	Leu	Glu	Cys	Ala
			100					105						110	

Arg

<210> 1675

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1675

gccggcgccac ccacctggga cgtggtgaaa tcggcaaaac tcacctcttt agctacctgc  
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 120  
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta  
 180  
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcctt cgcactccac  
 240  
 ccgcacacgc cctgggaacc gtcacccgcg gtaccaccgg gtcaatcggc tccgcaaatg  
 300  
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gctccgtaac gccgtctgca  
 360  
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg  
 420  
 atgcagcaac aggcgctccg ctgcctatcg atctgggata cggcgccgccc ccctggacca  
 480  
 ctgttgagat ggctacgcgt  
 500

<210> 1676  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 1676  
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp  
 1 5 10 15  
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg  
 20 25 30  
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr  
 35 40 45  
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr  
 50 55 60  
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu  
 65 70 75 80  
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu  
 85 90 95  
 Arg

<210> 1677  
 <211> 631  
 <212> DNA  
 <213> Homo sapiens

<400> 1677  
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 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cnnccggggag  
 120  
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtggtc gaatggtcgg  
 180  
 gtggggccttt tcggtaaata ctacgatggg gggacggggt cttattgctg caggtaatca  
 240  
 gcccgggggg ttggtgctg tgggtggcga ggagccagct atggagccct acacttacct  
 300  
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat  
 360  
 tgctgcctcc cccggccgtg tccttcacga cactcccga tatatgaaga acagtgtcta  
 420  
 cgagggtggcc caccgcatt gcctgtccga caatttgcgt aattctttag accccatccg  
 480  
 tagccacaaa taatgggcgg gatcggtctt tccctcacca agacgcataa tttcccccg  
 540  
 gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttgggtga  
 600  
 attgttgaag gaccgtaagg ctccgacgcg t  
 631

<210> 1678  
 <211> 78  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1678

Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr  
 1                      5                      10                      15  
 Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu  
                     20                      25                      30  
 Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val  
                     35                      40                      45  
 Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe  
                     50                      55                      60  
 Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg  
 65                      70                      75

&lt;210&gt; 1679

&lt;211&gt; 531

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1679

nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttccac  
 60  
 agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag  
 120  
 cagctgatct gccctatctg cctggagatg ttaccacgag cagtgggtcat cttgccgtgc  
 180  
 cagcacaacc tgtgccgga gtgtgccaat gacatcttcc aggtgcaaa tccctactgg  
 240  
 accagccggg gcagctcagt gtccatgtct ggaggccggt tccgctgccc tacctgccgc  
 300  
 cagcaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctgggtggag  
 360  
 aacatcatcg acatctacaa acaggagtg tccagtcggc cgctgcagaa gggcagtcac  
 420  
 cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg  
 480  
 cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g  
 531

&lt;210&gt; 1680

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1680

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met  
 1                      5                      10                      15  
 Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg  
                     20                      25                      30  
 Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser  
                     35                      40                      45  
 Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr  
                     50                      55                      60  
 Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

```

<210> 1681  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1681
gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtccgtt acaagaagga gccttccggg tgcccgtgtg gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttccg cgtggatgtg ctcagg
396

```

<210> 1682  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1682
Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
1      5      10      15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
20     25     30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
35     40     45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
50     55     60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65     70     75     80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
85     90     95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
100    105    110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
115    120    125
Asp Val Leu Arg

```

130

&lt;210&gt; 1683

&lt;211&gt; 676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1683

```

nncggccgga caggtcccgga gcagccccgc ccaacatgga cccagacccc caggcgggcg
60
tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtccgg caccccaaca
300
tcattctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgccccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcg
480
tcccaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctcacaggat ggtgagtggg ggcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaagg
660
aaaccgggccc gccgga
676

```

&lt;210&gt; 1684

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1684

```

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1      5      10      15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20      25      30
Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
35      40      45
Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
50      55      60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65      70      75      80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
85      90      95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100     105     110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```



115 120 125  
 Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala  
 130 135 140  
 Thr Arg Pro Leu Thr Arg Ala Leu Ser His  
 145 150

<210> 1685  
 <211> 2740  
 <212> DNA  
 <213> Homo sapiens

<400> 1685  
 ngaggaggag ccggcggcgg ctccggggaa agggaggggg gcgctccgca gccgccgcg  
 60  
 ccaggggct ggcgaggaa aggcgtacgc gctcagcaga gggcgggcag cggcggggag  
 120  
 ggggcctccc cttctccatc ctctcttct gcgggcaaaa cccaggaac cggcagcaga  
 180  
 aactccggaa gcggcggtgc ggggggcggc agcgggtggtg gagggagcta ctggaaagaa  
 240  
 ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggagcggcg  
 300  
 gcggccgcgg ctcatatgca cgctaagaac ggcgggcgga gcagtagccg cagctccccg  
 360  
 gtgtctggcc cccctgccgt ttgcgagacc ctggcgcgtc cctccgctc cccaatggcg  
 420  
 gcggcggcgg agggccccc gcagagcgca gagggcagcg cgagcggcg gggcatgcag  
 480  
 gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg  
 540  
 caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag  
 600  
 ctgagaaccg agatggacga gatgaggac actttcttcg aggaggatgc ctgtcaactg  
 660  
 caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc  
 720  
 ctccgcaaag ccgagcgcaa aaggctccgc tacgcccaga ccggggaaat cgacggggag  
 780  
 ctgttcgcga gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac  
 840  
 catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg  
 900  
 aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa  
 960  
 atgaaagagt tatecttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag  
 1020  
 gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttgtt  
 1080  
 aaggaaagag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga  
 1140  
 tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc  
 1200  
 aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg  
 1260

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagAAC  
1320  
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca  
1380  
accgcctcat gagggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg  
1440  
gtggaagacg agacggagct gctgaggagg aacgtggccg acctggagga gcagaacaag  
1500  
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc  
1560  
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgcctg  
1620  
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg  
1680  
tccaacatgc agcgtacga cctggcctcg cacctgggca tccgcggcag ccccgcgac  
1740  
agcgacgccg agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac  
1800  
cgcaagcgcg aaggggcccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc  
1860  
gctgcctcan cgccactcg ctcttctac ccggcgcccg ggccctggcc caagagcttc  
1920  
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgccctggg caagaccatc  
1980  
gaccggtca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa  
2040  
cggggacctg ttncggact catggacgag gaggacgacg gcagccgcac ccgggagcac  
2100  
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc  
2160  
atcgaccgcc tcgaggtgcc caagtctgcg gacgaccgcg gcgcgagga gccatttcc  
2220  
gtgagtcaga tgttccagcc tatcatttta cttatttca ttcttgatt attttcatca  
2280  
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2340  
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcacccttc  
2400  
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag  
2460  
actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaattc aataagaagc  
2520  
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa  
2580  
tttttacttc ttttttcat cctgtttgtc tctcttgat aaataattgg catactgaat  
2640  
ataaaaatgg actacatgtc tcataattat ttctcagtag ttcactatta ttattcaaaa  
2700  
gctggacgga cattcacaat ttggtcacat ttccaaaaag  
2740

&lt;210&gt; 1686

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro  
 1 5 10 15  
 Gln Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln  
 20 25 30  
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser  
 35 40 45  
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser  
 50 55 60  
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu  
 65 70 75 80  
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg  
 85 90 95  
 Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly  
 100 105 110  
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys  
 115 120 125  
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu  
 130 135 140  
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln  
 145 150 155 160  
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu  
 165 170 175  
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu  
 180 185 190  
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met  
 195 200 205  
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg  
 210 215 220  
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg  
 225 230 235 240  
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu  
 245 250 255  
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala  
 260 265 270  
 Lys Asp Val Ser Val Arg Leu His Glu Leu Glu Asn Val Glu Glu  
 275 280 285  
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu  
 290 295 300  
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys  
 305 310 315 320  
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys  
 325 330 335  
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp  
 340 345 350  
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg  
 355 360 365  
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu  
 370 375 380  
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro  
 385 390 395 400  
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

                405                410                415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
                420                425                430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
                435                440                445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
                450                455                460

```

&lt;210&gt; 1687

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1687

```

gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcaactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

&lt;210&gt; 1688

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1688

```

Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1      5      10      15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
20     25     30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
35     40     45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
50     55     60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65     70     75     80
Phe Glu Gln His Arg Thr Arg Val Pro
85

```

&lt;210&gt; 1689

&lt;211&gt; 301

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1689

```

nggggaagcc atggctgctt aaggacaatg cactgtcagc tccgtgatgt cttgatttgg
60

```

tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa  
 120  
 ttggcctttt cccagtccat taagcctaaa caaaccacat cactttacat caggcagatc  
 180  
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaatcaac taaattattg  
 240  
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc  
 300  
 a  
 301

<210> 1690  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1690  
 Met His Cys Gln Leu Gly Asp Val Leu Ile Trp Ser Gly Ile Leu His  
 1 5 10 15  
 Leu Val Ile Ala Asp Asn Thr His Val Ala Pro Arg Lys Lys Lys Leu  
 20 25 30  
 Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile  
 35 40 45  
 Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu  
 50 55 60  
 Ile Lys Ser Thr Lys Leu Leu Pro Leu Trp Leu Ser Val Lys Glu His  
 65 70 75 80  
 Asn Glu Glu Asn Leu Glu Pro Tyr Leu Ile Leu  
 85 90

<210> 1691  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

<400> 1691  
 nacgcgttcc ggtatgccga tgggccggtg ctgctgggcg tccgccggcg gcgcggtgag  
 60  
 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc  
 120  
 ttcgaagaat tcaaacgcct ggacagtcac cagaccgcg ccgagaaagg cctgggcctg  
 180  
 ggcttgccga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg  
 240  
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc  
 300  
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt  
 360  
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc  
 420  
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tggtggctga ggggtgtgcg  
 480  
 ccg  
 483

<210> 1692  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 1692  
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg  
 1 5 10 15  
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile  
 20 25 30  
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp  
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 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile  
 50 55 60  
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser  
 65 70 75 80  
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg  
 85 90 95  
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro  
 100 105 110  
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu  
 115 120 125  
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<210> 1693  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1693  
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 <213> Homo sapiens

&lt;400&gt; 1694

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Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
           20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
           35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
           50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
           65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
           85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
           100           105           110

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&lt;210&gt; 1695

&lt;211&gt; 485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1695

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&lt;210&gt; 1696

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1696

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Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1           5           10           15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
           20           25           30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
           35           40           45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

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65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100              105              110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115              120              125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130              135              140
Glu Gly Tyr Leu
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&lt;210&gt; 1697

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1697

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337

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&lt;210&gt; 1698

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1698

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Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
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Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35              40              45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50              55              60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
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      85              90              95
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 35 40 45  
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly  
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 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr  
 65 70 75 80  
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 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu  
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 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile  
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<210> 1701  
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 <213> Homo sapiens

&lt;400&gt; 1701

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<210> 1702

<211> 2541

<212> PRT

<213> Homo sapiens

<400> 1702

Met	Val	Ala	Leu	Ser	Leu	Lys	Ile	Ser	Ile	Gly	Asn	Val	Val	Lys	Thr
1				5					10					15	
Met	Gln	Phe	Glu	Pro	Ser	Thr	Met	Val	Tyr	Asp	Ala	Cys	Arg	Ile	Ile
			20					25					30		
Arg	Glu	Arg	Ile	Pro	Glu	Ala	Pro	Ala	Gly	Pro	Pro	Ser	Asp	Phe	Gly
		35					40					45			
Leu	Phe	Leu	Ser	Asp	Asp	Asp	Pro	Lys	Lys	Gly	Ile	Trp	Leu	Glu	Ala
	50					55					60				
Gly	Lys	Ala	Leu	Asp	Tyr	Tyr	Met	Leu	Arg	Asn	Gly	Asp	Thr	Met	Glu
65				70					75				80		
Tyr	Arg	Lys	Lys	Gln	Arg	Pro	Leu	Lys	Ile	Arg	Met	Leu	Asp	Gly	Thr
			85					90					95		
Val	Lys	Thr	Ile	Met	Val	Asp	Asp	Ser	Lys	Thr	Val	Thr	Asp	Met	Leu
			100					105					110		
Met	Thr	Ile	Cys	Ala	Arg	Ile	Gly	Ile	Thr	Asn	His	Asp	Glu	Tyr	Ser
	115						120					125			
Leu	Val	Arg	Glu	Leu	Met	Glu	Glu	Lys	Lys	Glu	Glu	Gly	Thr	Gly	Thr
	130					135						140			
Leu	Lys	Lys	Asp	Lys	Thr	Leu	Leu	Arg	Asp	Glu	Lys	Lys	Met	Glu	Lys
145				150					155				160		
Leu	Lys	Gln	Lys	Leu	His	Thr	Asp	Asp	Glu	Leu	Asn	Trp	Leu	Asp	His
			165						170				175		
Gly	Arg	Thr	Leu	Arg	Glu	Gln	Gly	Val	Glu	Glu	His	Glu	Thr	Leu	Leu
			180					185					190		
Leu	Arg	Arg	Lys	Phe	Phe	Tyr	Ser	Asp	Gln	Asn	Val	Asp	Ser	Arg	Asp
	195						200					205			
Pro	Val	Gln	Leu	Asn	Leu	Leu	Tyr	Val	Gln	Ala	Arg	Asp	Asp	Ile	Leu
	210					215						220			
Asn	Gly	Ser	His	Pro	Val	Ser	Phe	Asp	Lys	Ala	Cys	Glu	Phe	Ala	Gly
225				230					235				240		
Phe	Gln	Cys	Gln	Ile	Gln	Phe	Gly	Pro	His	Asn	Glu	Gln	Lys	His	Lys
			245						250				255		
Ala	Gly	Phe	Leu	Asp	Leu	Lys	Asp	Phe	Leu	Pro	Lys	Glu	Tyr	Val	Lys
	260							265					270		
Gln	Lys	Gly	Glu	Arg	Lys	Ile	Phe	Gln	Ala	His	Lys	Asn	Cys	Gly	Gln
	275						280					285			
Met	Ser	Glu	Ile	Glu	Ala	Lys	Val	Arg	Tyr	Val	Lys	Leu	Ala	Arg	Ser
	290					295					300				
Leu	Lys	Thr	Tyr	Gly	Val	Ser	Phe	Phe	Leu	Val	Lys	Glu	Lys	Met	Lys

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305          310          315          320
Gly Lys Asn Lys Leu Val Pro Arg Leu Leu Gly Ile Thr Lys Glu Cys
          325          330          335
Val Met Arg Val Asp Glu Lys Thr Lys Glu Val Ile Gln Glu Trp Asn
          340          345          350
Leu Thr Asn Ile Lys Arg Trp Ala Ala Ser Pro Lys Ser Phe Thr Leu
          355          360          365
Asp Phe Gly Asp Tyr Gln Asp Gly Tyr Tyr Ser Val Gln Thr Thr Glu
          370          375          380
Gly Glu Gln Ile Ala Gln Leu Ile Ala Gly Tyr Ile Asp Ile Ile Leu
385          390          395          400
Lys Lys Lys Lys Ser Lys Asp His Phe Gly Leu Glu Gly Asp Glu Glu
          405          410          415
Ser Thr Met Leu Glu Asp Ser Val Ser Pro Lys Lys Ser Thr Val Leu
          420          425          430
Gln Gln Gln Tyr Asn Arg Val Gly Lys Val Glu His Gly Ser Val Ala
          435          440          445
Leu Pro Ala Ile Met Arg Ser Gly Ala Ser Gly Pro Glu Asn Phe Gln
          450          455          460
Val Gly Ser Met Pro Pro Ala Gln Gln Gln Ile Thr Ser Gly Gln Met
465          470          475          480
His Arg Gly His Met Pro Pro Leu Thr Ser Ala Gln Gln Ala Leu Thr
          485          490          495
Gly Thr Ile Asn Ser Ser Met Gln Ala Val Gln Ala Ala Gln Ala Thr
          500          505          510
Leu Asp Asp Phe Asp Thr Leu Pro Pro Leu Gly Gln Asp Ala Ala Ser
          515          520          525
Lys Ala Trp Arg Lys Asn Lys Met Asp Glu Ser Lys His Glu Ile His
          530          535          540
Ser Gln Val Asp Ala Ile Thr Ala Gly Thr Ala Ser Val Val Asn Leu
545          550          555          560
Thr Ala Gly Asp Pro Ala Glu Thr Asp Tyr Thr Ala Val Gly Cys Ala
          565          570          575
Val Thr Thr Ile Ser Ser Asn Leu Thr Glu Met Ser Arg Gly Val Lys
          580          585          590
Leu Leu Ala Ala Leu Leu Glu Asp Glu Gly Gly Ser Gly Arg Pro Leu
          595          600          605
Leu Gln Ala Ala Lys Gly Leu Ala Gly Ala Val Ser Glu Leu Leu Arg
          610          615          620
Ser Ala Gln Pro Ala Ser Ala Glu Pro Arg Gln Asn Leu Leu Gln Ala
625          630          635          640
Ala Gly Asn Val Gly Gln Ala Ser Gly Glu Leu Leu Gln Gln Ile Gly
          645          650          655
Glu Ser Asp Thr Asp Pro His Phe Gln Asp Ala Leu Met Gln Leu Ala
          660          665          670
Lys Ala Val Ala Ser Ala Ala Ala Leu Val Leu Lys Ala Lys Ser
          675          680          685
Val Ala Gln Arg Thr Glu Asp Ser Gly Leu Gln Thr Gln Val Ile Ala
          690          695          700
Ala Ala Thr Gln Cys Ala Leu Ser Thr Ser Gln Leu Val Ala Cys Thr
705          710          715          720
Lys Val Val Ala Pro Thr Ile Ser Ser Pro Val Cys Gln Glu Gln Leu
          725          730          735
Val Glu Ala Gly Arg Leu Val Ala Lys Ala Val Lys Gly Cys Val Ser

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740										745										750																											
Ala	Ser	Gln	Ala	Ala	Thr	Glu	Asp	Gly	Gln	Leu	Leu	Arg	Gly	Val	Gly	Ala	Ser	Gln	Ala	Ala	Thr	Glu	Asp	Gly	Gln	Leu	Leu	Arg	Gly	Val	Gly	Ala	Ser	Gln	Ala	Ala	Thr	Glu	Asp	Gly	Gln	Leu	Leu	Arg	Gly	Val	Gly
755										760										765																											
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770										775										780																											
Val	Lys	Ala	His	Ala	Thr	Gly	Ala	Gly	Pro	Ala	Gly	Arg	Tyr	Asp	Gln	Val	Lys	Ala	His	Ala	Thr	Gly	Ala	Gly	Pro	Ala	Gly	Arg	Tyr	Asp	Gln	Val	Lys	Ala	His	Ala	Thr	Gly	Ala	Gly	Pro	Ala	Gly	Arg	Tyr	Asp	Gln
785										790										795																											
Ala	Thr	Asp	Thr	Ile	Leu	Thr	Val	Thr	Glu	Asn	Ile	Phe	Ser	Ser	Met	Ala	Thr	Asp	Thr	Ile	Leu	Thr	Val	Thr	Glu	Asn	Ile	Phe	Ser	Ser	Met	Ala	Thr	Asp	Thr	Ile	Leu	Thr	Val	Thr	Glu	Asn	Ile	Phe	Ser	Ser	Met
805										810										815																											
Gly	Asp	Ala	Gly	Glu	Met	Val	Arg	Gln	Ala	Arg	Ile	Leu	Ala	Gln	Ala	Gly	Asp	Ala	Gly	Glu	Met	Val	Arg	Gln	Ala	Arg	Ile	Leu	Ala	Gln	Ala	Gly	Asp	Ala	Gly	Glu	Met	Val	Arg	Gln	Ala	Arg	Ile	Leu	Ala	Gln	Ala
820										825										830																											
Thr	Ser	Asp	Leu	Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser	Thr	Ser	Asp	Leu	Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser	Thr	Ser	Asp	Leu	Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser
835										840										845																											
Asp	Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala	Asp	Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala	Asp	Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala
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Asp	Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His	Asp	Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His	Asp	Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His
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Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly	Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly	Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly
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Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys	Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys	Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys
900										905										910																											
Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ala	Ser	Ala	Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ala	Ser	Ala	Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ala	Ser	Ala
915										920										925																											
Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala	Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala	Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala
930										935										940																											
Ser	Ala	Gly	Pro	Gln	Pro	Leu	Leu	Val	Gln	Ser	Cys	Lys	Ala	Val	Ala	Ser	Ala	Gly	Pro	Gln	Pro	Leu	Leu	Val	Gln	Ser	Cys	Lys	Ala	Val	Ala	Ser	Ala	Gly	Pro	Gln	Pro	Leu	Leu	Val	Gln	Ser	Cys	Lys	Ala	Val	Ala
945										950										955																											
Glu	Gln	Ile	Pro	Leu	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln	Glu	Gln	Ile	Pro	Leu	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln	Glu	Gln	Ile	Pro	Leu	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln
965										970										975																											
Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser	Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser	Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser
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Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val	Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val	Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val
995										1000										1005																											
Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala	Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala	Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala
1010										1015										1020																											
Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys	Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys	Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys
1025										1030										1035																											
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1045										1050										1055																											
Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg	Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg	Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg
1060										1065										1070																											
Asp	Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr	Asp	Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr	Asp	Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr
1075										1080										1085																											
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1090										1095										1100																											
Leu	Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	Ala	Leu	Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	Ala	Leu	Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	Ala
1105										1110										1115																											
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1125										1130										1135																											
Gly	Val	Ala	Ala	Leu	Thr	Ser	Asp	Pro	Ala	Val	Gln	Ala	Ile	Val	Leu	Gly	Val	Ala	Ala	Leu	Thr	Ser	Asp	Pro	Ala	Val	Gln	Ala	Ile	Val	Leu	Gly	Val	Ala	Ala	Leu	Thr	Ser	Asp	Pro	Ala	Val	Gln	Ala	Ile	Val	Leu
1140										1145										1150																											
Asp	Thr	Ala	Ser	Asp	Val	Leu	Asp	Lys	Ala	Ser	Ser	Leu	Ile	Glu	Glu	Asp	Thr	Ala	Ser	Asp	Val	Leu	Asp	Lys	Ala	Ser	Ser	Leu	Ile	Glu	Glu	Asp	Thr	Ala	Ser	Asp	Val	Leu	Asp	Lys	Ala	Ser	Ser	Leu	Ile	Glu	Glu
1155										1160										1165																											
Ala	Lys	Lys	Ala	Ala	Gly	His	Pro	Gly	Asp	Pro	Glu	Ser	Gln	Gln	Arg	Ala	Lys	Lys	Ala	Ala	Gly	His	Pro	Gly	Asp	Pro	Glu	Ser	Gln	Gln	Arg	Ala	Lys	Lys	Ala	Ala	Gly	His	Pro	Gly	Asp	Pro	Glu	Ser	Gln	Gln	Arg

1170	1175	1180
Leu Ala Gln Val Ala Lys Ala Val Thr Gln Ala Leu Asn Arg Cys Val		
1185	1190	1195
Ser Cys Leu Pro Gly Gln Arg Asp Val Asp Asn Ala Leu Arg Ala Val		1200
	1205	1210
Gly Asp Ala Ser Lys Arg Leu Leu Ser Asp Ser Leu Pro Pro Ser Thr		1215
	1220	1225
Gly Thr Phe Gln Glu Ala Gln Ser Arg Leu Asn Glu Ala Ala Ala Gly		1230
	1235	1240
Leu Asn Gln Ala Ala Thr Glu Leu Val Gln Ala Ser Arg Gly Thr Pro		1245
	1250	1255
Gln Asp Leu Ala Arg Ala Ser Gly Arg Phe Gly Gln Asp Phe Ser Thr		1260
1265	1270	1275
Phe Leu Glu Ala Gly Val Glu Met Ala Gly Gln Ala Pro Ser Gln Glu		1280
	1285	1290
Asp Arg Ala Gln Val Val Ser Asn Leu Lys Gly Ile Ser Met Ser Ser		1295
	1300	1305
Ser Lys Leu Leu Leu Ala Ala Lys Ala Leu Ser Thr Asp Pro Ala Ala		1310
	1315	1320
Pro Asn Leu Lys Ser Gln Leu Ala Ala Ala Arg Ala Val Thr Asp		1325
	1330	1335
Ser Ile Asn Gln Leu Ile Thr Met Cys Thr Gln Gln Ala Pro Gly Gln		1340
1345	1350	1355
Lys Glu Cys Asp Asn Ala Leu Arg Glu Leu Glu Thr Val Arg Glu Leu		1360
	1365	1370
Leu Glu Asn Pro Val Gln Pro Ile Asn Asp Met Ser Tyr Phe Gly Cys		1375
	1380	1385
Leu Asp Ser Val Met Glu Asn Ser Lys Val Leu Gly Glu Ala Met Thr		1390
	1395	1400
Gly Ile Ser Gln Asn Ala Lys Asn Gly Asn Leu Pro Glu Phe Gly Asp		1405
	1410	1415
Ala Ile Ser Thr Ala Ser Lys Ala Leu Cys Gly Phe Thr Glu Ala Ala		1420
1425	1430	1435
Ala Gln Ala Ala Tyr Leu Val Gly Val Ser Asp Pro Asn Ser Gln Ala		1440
	1445	1450
Gly Gln Gln Gly Leu Val Glu Pro Thr Gln Phe Ala Arg Ala Asn Gln		1455
	1460	1465
Ala Ile Gln Met Ala Cys Gln Ser Leu Gly Glu Pro Gly Cys Thr Gln		1470
	1475	1480
Ala Gln Val Leu Ser Ala Ala Thr Ile Val Ala Lys His Thr Ser Ala		1485
	1490	1495
Leu Cys Asn Ser Cys Arg Leu Ala Ser Ala Arg Thr Thr Asn Pro Thr		1500
1505	1510	1515
Ala Lys Arg Gln Phe Val Gln Ser Ala Lys Glu Val Ala Asn Ser Thr		1520
	1525	1530
Ala Asn Leu Val Lys Thr Ile Lys Ala Leu Asp Gly Ala Phe Thr Glu		1535
	1540	1545
Glu Asn Arg Ala Gln Cys Arg Ala Ala Thr Ala Pro Leu Leu Glu Ala		1550
	1555	1560
Val Asp Asn Leu Ser Ala Phe Ala Ser Asn Pro Glu Phe Ser Ser Ile		1565
	1570	1575
Pro Ala Gln Ile Ser Pro Glu Gly Arg Ala Ala Met Glu Pro Ile Val		1580
1585	1590	1595
Ile Ser Ala Lys Thr Met Leu Glu Ser Ala Gly Gly Leu Ile Gln Thr		1600

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1605      1610      1615
Ala Arg Ala Leu Ala Val Asn Pro Arg Asp Pro Pro Ser Trp Ser Val
1620      1625      1630
Leu Ala Gly His Ser Arg Thr Val Ser Asp Ser Ile Lys Lys Leu Ile
1635      1640      1645
Thr Ser Met Arg Asp Lys Ala Pro Gly Gln Leu Glu Cys Glu Thr Ala
1650      1655      1660
Ile Ala Ala Leu Asn Ser Cys Leu Arg Asp Leu Asp Gln Ala Ser Leu
1665      1670      1675      1680
Ala Ala Val Ser Gln Gln Leu Ala Pro Arg Glu Gly Ile Ser Gln Glu
1685      1690      1695
Ala Leu His Thr Gln Met Leu Thr Ala Val Gln Glu Ile Ser His Leu
1700      1705      1710
Ile Glu Pro Leu Ala Asn Ala Ala Arg Ala Glu Ala Ser Gln Leu Gly
1715      1720      1725
His Lys Val Ser Gln Met Ala Gln Tyr Phe Glu Pro Leu Thr Leu Ala
1730      1735      1740
Ala Val Gly Ala Ala Ser Lys Thr Leu Ser His Pro Gln Gln Met Ala
1745      1750      1755      1760
Leu Leu Asp Gln Thr Lys Thr Leu Ala Glu Ser Ala Leu Gln Leu Leu
1765      1770      1775
Tyr Thr Ala Lys Glu Ala Gly Gly Asn Pro Lys Gln Ala Ala His Thr
1780      1785      1790
Gln Glu Ala Leu Glu Glu Ala Val Gln Met Met Thr Glu Ala Val Glu
1795      1800      1805
Asp Leu Thr Thr Thr Leu Asn Glu Ala Ala Ser Ala Ala Gly Val Val
1810      1815      1820
Gly Gly Met Val Asp Ser Ile Thr Gln Ala Ile Asn Gln Leu Asp Glu
1825      1830      1835      1840
Gly Pro Met Gly Glu Pro Glu Gly Ser Phe Val Asp Tyr Gln Thr Thr
1845      1850      1855
Met Val Arg Thr Ala Lys Ala Ile Ala Val Thr Val Gln Glu Met Val
1860      1865      1870
Thr Lys Ser Asn Thr Ser Pro Glu Glu Leu Gly Pro Leu Ala Asn Gln
1875      1880      1885
Leu Thr Ser Asp Tyr Gly Arg Leu Ala Ser Glu Ala Lys Pro Ala Ala
1890      1895      1900
Val Ala Ala Glu Asn Glu Glu Ile Gly Ser His Ile Lys His Arg Val
1905      1910      1915      1920
Gln Glu Leu Gly His Gly Cys Ala Ala Leu Val Thr Lys Ala Gly Ala
1925      1930      1935
Leu Gln Cys Ser Pro Ser Asp Ala Tyr Thr Lys Lys Glu Leu Ile Glu
1940      1945      1950
Cys Ala Arg Arg Val Ser Glu Lys Val Ser His Val Leu Ala Ala Leu
1955      1960      1965
Gln Ala Gly Asn Arg Gly Thr Gln Ala Cys Ile Thr Ala Ala Ser Ala
1970      1975      1980
Val Ser Gly Ile Ile Ala Asp Leu Asp Thr Thr Ile Met Phe Ala Thr
1985      1990      1995      2000
Ala Gly Thr Leu Asn Arg Glu Gly Thr Glu Thr Ser Ala Asp His Arg
2005      2010      2015
Glu Gly Ile Leu Lys Thr Ala Lys Val Leu Val Glu Asp Thr Lys Val
2020      2025      2030
Leu Val Gln Asn Ala Ala Gly Ser Gln Glu Lys Leu Ala Gln Ala Ala

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2035	2040	2045
Gln Ser Ser Val Ala Thr Ile Thr Arg Leu Ala Asp Val Val Lys Leu		
2050	2055	2060
Gly Ala Ala Ser Leu Gly Ala Glu Asp Pro Glu Thr Gln Val Val Leu		
2065	2070	2075
Ile Asn Ala Val Lys Asp Val Ala Lys Ala Leu Gly Asp Leu Ile Ser		2080
2085	2090	2095
Ala Thr Lys Ala Ala Ala Gly Lys Val Gly Asp Asp Pro Ala Val Trp		
2100	2105	2110
Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu		
2115	2120	2125
Leu Lys Thr Val Lys Ala Val Glu Asp Glu Ala Thr Lys Gly Thr Arg		
2130	2135	2140
Ala Leu Glu Ala Thr Thr Glu His Ile Arg Gln Glu Leu Ala Val Phe		
2145	2150	2155
Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile		
2165	2170	2175
Arg Met Thr Lys Gly Ile Thr Met Ala Thr Ala Lys Ala Val Ala Ala		
2180	2185	2190
Gly Asn Ser Cys Arg Gln Glu Asp Val Ile Ala Thr Ala Asn Leu Ser		
2195	2200	2205
Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr		
2210	2215	2220
His Pro Glu Val Ala Pro Asp Val Arg Leu Arg Ala Leu His Tyr Gly		
2225	2230	2235
Arg Glu Cys Ala Asn Gly Tyr Leu Glu Leu Leu Asp His Val Leu Leu		
2245	2250	2255
Thr Leu Gln Lys Pro Ser Pro Glu Leu Lys Gln Gln Leu Thr Gly His		
2260	2265	2270
Ser Lys Arg Val Ala Gly Ser Val Thr Glu Leu Ile Gln Ala Ala Glu		
2275	2280	2285
Ala Met Lys Gly Thr Glu Trp Val Asp Pro Glu Asp Pro Thr Val Ile		
2290	2295	2300
Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ile Glu Ala Ala Ala		
2305	2310	2315
Lys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Asp		
2325	2330	2335
Glu Ser Leu Asn Phe Glu Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile		
2340	2345	2350
Ala Ala Ala Thr Ser Ala Leu Val Lys Ala Ala Ser Ala Ala Gln Arg		
2355	2360	2365
Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu		
2370	2375	2380
Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val		
2385	2390	2395
Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln		
2405	2410	2415
Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala		
2420	2425	2430
Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln		
2435	2440	2445
Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys		
2450	2455	2460
Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Phe		

2465	2470	2475	2480
Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly			
	2485	2490	2495
Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu			
	2500	2505	2510
Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln			
	2515	2520	2525
Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His			
2530	2535	2540	

<210> 1703  
 <211> 346  
 <212> DNA  
 <213> Homo sapiens

<400> 1703  
 ggatcccgag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta  
 60  
 ggaatctgtg atggagaaga atgactcttc ttcttctctg agtctctgtag taatgcattc  
 120  
 tctgctctac ctttctccat gactgctgcc tggctctgtcc tagccttgct ctgatccaca  
 180  
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg  
 240  
 gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg  
 300  
 tgaatgactg tgccatccat ggccaccaag ttccctttct ctgcgt  
 346

<210> 1704  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1704	
Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg	
1	15
His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala	
20	30
Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val	
35	45
Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly	
50	60
Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His	
65	80
Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His	
85	95
Glu Val Thr Glu Asp Phe Ser Pro Arg Asp	
100	105

<210> 1705  
 <211> 377  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1705

gtgcaccttt tctcaggact cgctcagaag gtccttcttg gaggacaatg gacaagacta  
 60  
 aaccatcaaa tccattctca atgggtcaaa ttccaaattt tcctgaaggg ctggcttcta  
 120  
 ctggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagtta tttaatcctg  
 180  
 gttttggctg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc  
 240  
 ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag  
 300  
 cttttaactc tgccctgca ccacagatgg aatttccac agttcctcca tacaaccct  
 360  
 cttccttcgg agctagc  
 377

&lt;210&gt; 1706

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
		35				40					45				
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
	50					55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
			85					90					95		
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105					110		

&lt;210&gt; 1707

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1707

nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc  
 60  
 catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcga  
 120  
 gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga  
 180  
 gtcacacctg cgggtgttca accttcttc aaggaggacg acctagctct gctggagtgg  
 240  
 taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct  
 300

gatcttatcg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggccgcgt  
 360  
 cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc  
 420  
 gacgcgt  
 427

<210> 1708

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1708

Xaa	Ser	Val	Asn	Pro	Lys	Pro	Gly	Arg	Ser	Ala	Asp	Thr	His	Val	Arg
1			5					10					15		
Pro	Val	Leu	Arg	His	His	Ala	Lys	Arg	Val	Leu	Ile	Ile	Gly	Ala	Gly
		20					25					30			
Leu	Ala	Gly	Met	Glu	Ala	Ala	Arg	Val	Leu	Ser	Glu	Arg	Ala	His	Glu
	35					40				45					
Pro	Leu	Ile	Val	Glu	Ala	Ser	Asp	His	Ile	Gly	Gly	Val	Ile	Leu	Ala
	50					55				60					
Gly	Gly	Gln	Pro	Ser	Phe	Lys	Glu	Asp	Asp	Leu	Ala	Leu	Leu	Glu	Trp
65				70				75					80		
Tyr	Arg	Thr	Thr	Leu	Glu	Glu	Leu	Gly	Val	Glu	Ile	Arg	Leu	Asn	Thr
		85					90					95			
Thr	Val	Thr	Ala	Asp	Leu	Ile	Ala	Ser	Phe	Gly	Ala	Asp	His	Val	Val
		100					105					110			
Leu	Ala	Thr	Gly	Ser	Arg	Pro	Arg	Arg	Leu	Asp	Leu	Gly	Asp	Asp	Ala
	115					120				125					
Lys	Val	Ile	Asp	Ala	Thr	Asp	Ala	Leu	Leu	Asn	Arg	Asp	Ala		
	130					135				140					

<210> 1709

<211> 446

<212> DNA

<213> Homo sapiens

<400> 1709

acgcgtgaag gggaccagga gggtggacac agaccattgc aatggaaatg atgatttaga  
 60  
 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac  
 120  
 ctcctcttcc agccacatca tatctcagcc tcttgaggga aactcccata gcttgtctct  
 180  
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac  
 240  
 caggttgttg caagagggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc  
 300  
 tgcatgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat  
 360  
 gataactgta gcttatgtga aatcattgtt tctcagcctt gccagctatt tcaaaaccac  
 420  
 tgcctgtgct cggtttgtca aaattt  
 446

<210> 1710  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 1710  
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser  
 1 5 10 15  
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu  
 20 25 30  
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr  
 35 40 45  
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys  
 50 55 60  
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala  
 65 70 75 80  
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser  
 85 90 95  
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg  
 100 105 110  
 Phe Val Lys Ile  
 115

<210> 1711  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1711  
 nggggggattc atgttagtat ttgtcagaaa aggccttttga aagagccaaa ttaaaaagag  
 60  
 cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt ttacagctc  
 120  
 cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc  
 180  
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca  
 240  
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgctca cgcacctttt  
 300  
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct  
 360  
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagagg gcccgaagat  
 420  
 ggatat  
 426

<210> 1712  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1712  
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln



```

      1           5           10           15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20           25           30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35           40           45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50           55           60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65           70           75           80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85           90           95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100          105          110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

&lt;210&gt; 1713

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1713

```

tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgatg aggtcagctt tggaggagca gggccagcgt gtcctgcttt ctgctcctgg
180
aatgagcctc actccctccc tgcctcaaggc agcccttcac ccagccgccg ggacagggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcatctg gctggtgact cctggggg
328

```

&lt;210&gt; 1714

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1           5           10           15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20           25           30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35           40           45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50           55           60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65           70           75           80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85           90           95
Ser Gly Trp

```

<210> 1715  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

<400> 1715  
 gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa  
 60  
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag  
 120  
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag  
 180  
 ttgatcatgg cctgtcatgg cgtagctctc tacgtcgtaa agtatgagac aatccacggt  
 240  
 aatatggtgt tttttggcca actcgggaagc cggggtgtcg gggaagtcgg tccctgtaag  
 300  
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctcg ccaaggttcg  
 360  
 aactcattac cgtcgaatac gacgctgtcg ccacggcgg tgcgaatcg aatcctcaaa  
 420  
 gtgtatccgt actcgggtgc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca  
 480  
 ctgacgcgt  
 489

<210> 1716  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1716  
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile  
 1 5 10 15  
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly  
 20 25 30  
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys  
 35 40 45  
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn  
 50 55 60  
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr  
 65 70 75 80  
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly  
 85 90 95  
 Cys Ala Leu Thr Arg  
 100

<210> 1717  
 <211> 312  
 <212> DNA  
 <213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga  
 60  
 gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccca  
 120  
 aatcccactg gaatacacag agagacataa aaacaaggag tgcctgttag cagagcagcc  
 180  
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg  
 240  
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc  
 300  
 catgaatgtg tc  
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5				10						15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70					75				80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85					90					95	
Leu	Arg	Cys	Met	Pro											
				100											

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccttgcca ttttttgctg ggaccgcaga ccgtatgctg cccctcgaag  
 60  
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggg  
 120  
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg  
 180  
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtotta  
 240  
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt  
 300  
 cccagcagag ccatcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga  
 360  
 ttcgagcagg gagcacccat tggtngtgg tgtccccggg gggt  
 404

<210> 1720  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1720  
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met  
 1 5 10 15  
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln  
 20 25 30  
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys  
 35 40 45  
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp  
 50 55 60  
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr  
 65 70 75 80  
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr  
 85 90 95  
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His  
 100 105 110  
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp  
 115 120 125

<210> 1721  
 <211> 529  
 <212> DNA  
 <213> Homo sapiens

<400> 1721  
 ccattggccac cctttcagga cagagctgcc ctteccatgc tggaggagcc acagggcctg  
 60  
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca  
 120  
 ggcaactcct gcttggatca ggggatctgg gtttcatctt cccagctcct cctgtcctct  
 180  
 gctgggcacc tgtgatgtcc aggcactccc tgcttggatt gggggatctg ggtttcatct  
 240  
 tcccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat  
 300  
 cgggggggtct ggggtttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac  
 360  
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac  
 420  
 cctgtgactc tgcttcgggt gttgtcaaata gggggtcata ccaggaccgc caccactggg  
 480  
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt  
 529

<210> 1722  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1              5              10              15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
      20              25              30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
      35              40              45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
      50              55              60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65              70              75              80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
      85              90              95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
      100             105             110
Phe Thr Gln Ala Pro Ser
      115

```

&lt;210&gt; 1723

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgccca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggtgtgc aatgggtgcca atcttcccgt tgagttgttg aatggcagtg
180
gcaaagttag gcgtaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgccag tggcttctct ttgctggccg ccggctgtct tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggatgatcg
360
tgcattcaat a
371

```

&lt;210&gt; 1724

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1              5              10              15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
      20              25              30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
      35              40              45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
      50              55              60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85						90					95	
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
			100					105					110		

<210> 1725  
 <211> 807  
 <212> DNA  
 <213> Homo sapiens

<400> 1725  
 ngtgcacctg gtatgggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg  
 60  
 atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctcccc tctctaggac  
 120  
 catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg  
 180  
 gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag  
 240  
 gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg  
 300  
 gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact  
 360  
 agtgctggag atactcgcca ggttgaggtg ctcaagaagg agctgctccg gacacaggag  
 420  
 gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggcg acaccgggac  
 480  
 cgggagttgg agaagcagct ggcggctcctg agggctcgagg ctgatcgagg tcgggagctg  
 540  
 gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag  
 600  
 gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggccc  
 660  
 gcagtggaga cgacgcttcg ggagaccag gaggaaaatg acgaattccg ccggcgcacg  
 720  
 ctgggtttgg agcagcagct gaaggagact cgaggtctgg tggatggtgg ggaagcggtg  
 780  
 gaggcacgac tacgggacaa gctgcag  
 807

<210> 1726  
 <211> 230  
 <212> PRT  
 <213> Homo sapiens

<400> 1726  
 Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val  
 1 5 10 15  
 Arg Gly Leu Gln Arg Glu Leu Glu Glu Thr Ser Glu Glu Thr Gly His  
 20 25 30  
 Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys  
 35 40 45  
 Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

```

      50              55              60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg
65              70              75              80
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu
      85              90              95
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser
      100             105             110
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu
      115             120             125
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln
      130             135             140
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu
145             150             155             160
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu
      165             170             175
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu
      180             185             190
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu
      195             200             205
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg
      210             215             220
Leu Arg Asp Lys Leu Gln
225             230

```

&lt;210&gt; 1727

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1727

```

aaccaactct ccacaacatc gccagaaaca gtcgctgccca agaggctcca ccatgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggaacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtatgt ggagcagttg cacttgcccc aaagcaaacc aatttcccca
240
aatttcaaag ttaaaaccat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

&lt;210&gt; 1728

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1             5             10             15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20             25             30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35             40             45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50             55             60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65             70             75             80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85             90             95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100            105            110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115            120            125
Gln Leu
      130

```

&lt;210&gt; 1729

&lt;211&gt; 470

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcgtt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaaccggcgc ataccgtcac catccacacc cccggatggg accgggtcct caaggtcac
240
aaccgatca cgaaaagagt cggcgccaaa ctgcggtcgc aggttacga agatctgtca
300
nngccccccg acccgcttac ctctctgnct cccctcgccc gcccgacgcg tggggctgga
360
cgaccaccca agaaggatcg tcgcgagatc gatcggctcc gaggccggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcgg ccgaattggc
470

```

&lt;210&gt; 1730

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1             5             10             15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20             25             30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35             40             45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```



```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100             105             110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115             120             125
Ser Arg Tyr
      130

```

&lt;210&gt; 1731

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1731

```

agcgctccct gcctgctgct gggcgaggagg aaggcgga gagctgcgga gcccctggaa
60
gagcttccag gaaccctgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgccgcag cgcaccgca cgtcttcagc cgcaccgttg tctgacctc tctgtcccg
180
ccctgcccc gtctcaccat ggccttctgg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggtccag ctctgggtcg aattgctgtg gcctctcttc
300
ctcttcttca tctgggtggc tggtcgccac tcccaccgc cctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctgggtcca gggctctcatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg ctgctacgtc ggagagaggc tgga
534

```

&lt;210&gt; 1732

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

	85		90		95
Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly					
100		105		110	

&lt;210&gt; 1733

&lt;211&gt; 409

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1733

```

acgcgtgatg gccgatccga ctgtgcccg tcacgacccg cggcgtccga gtcctgaccc
60
ggacatgccg tggctgatcc gcgacatcac cctcggcaac aacgtgatcg cgggcagcac
120
gggcaactgc accctctgcg tcgaggacta ctgcgcagg tacgcggcga ggatcctcaa
180
catcgtctcc gacggcaacg tcctgcagcg cgcacgcggc gcacagccag cgtggctggt
240
tggtgtggtc gcgggggatca gcgaactccg atccgtacgt attctccagc ctgcacgctt
300
accgggcgac cactggtttt taggaccttc gtcgggtctc gatcgatggc gtgctgtcac
360
cgcgcccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg
409

```

&lt;210&gt; 1734

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1734

Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro					
1	5	10	15		
Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn					
20	25	30			
Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr					
35	40	45			
Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn					
50	55	60			
Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val					
65	70	75	80		
Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg					
85	90	95			
Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp					
100	105	110			
Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp					
115	120	125			
Leu Lys Ala Val Thr Arg					
130					

&lt;210&gt; 1735

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1735

ggcgccatgg tcatcagcat catgtgttcg gcgcccgtg cacgaatgtt cgtgcgatca  
60  
agcgcgcctt ttagttcgac gcacggtaaa gcccggtgcg atcgatgtag gccaggaccg  
120  
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg  
180  
cggacaccgc aagcgggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg  
240  
ccaaggggtc acttaccgac cgcgcgcca gcaggttgcg caaggcatcc ggcggttcgc  
300  
tggcggcatc cgggcgttgc aaaaccagga tgtggcaatg ct  
342

&lt;210&gt; 1736

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
			35				40					45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50					55				60					
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65					70					75				80	
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
				85					90					95	
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105						110	

&lt;210&gt; 1737

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1737

acgcgtgttc accatgacct ggaccgcca gcggcccgac gggtcgagcg cggaggagtc  
60  
ggacgagacg actgtggtgg tccttgccat ctcagcgccc cacgggtacg acgtgcaggc  
120  
gtccggcgcc cacgtcacct cccaccaggg cgaccgggtg gcgcggttgc acctcaacca  
180  
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa ccttcaagc gtcttcagca  
240  
ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg  
300  
tccttttcgt gtcgtgggat gcacctggca gcaccacctc cggcccccat ggagaacagt  
360

aggatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc  
 420  
 gtcttagggc catactgccg ccacgcagct gagacggtga ccaatcgggt aaggtgactg  
 480  
 gttgccgtag tccatgagag gccggc  
 506

<210> 1738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1738

Met	Ala	Leu	Arg	Arg	Gln	Trp	Gln	Ala	Trp	Asn	Val	Lys	Tyr	Ala	Leu
1				5				10						15	
Ala	Val	Val	Pro	Cys	Glu	Asp	Thr	Tyr	Cys	Ser	Pro	Trp	Gly	Pro	Glu
			20					25					30		
Val	Val	Leu	Pro	Gly	Ala	Ser	His	Asp	Thr	Lys	Arg	Thr	Gly	Pro	Thr
		35				40					45				
Pro	Arg	Gly	Arg	Ala	Gly	Arg	Lys	Ser	Val	Trp	Glu	Thr	Tyr	Arg	Ser
	50				55						60				
Val	Leu	Lys	Thr	Leu	Glu	Gly	Leu	Ala	Gln	Gly	Asp	Arg	Asp	Leu	Arg
65				70					75					80	
Arg	Gly	Thr	Ala	Leu	Val	Glu	Val	Gln	Pro	Arg	His	Pro	Val	Ala	Trp
			85					90						95	
Val	Gly	Gly	Asp	Val	Gly	Ala	Gly	Arg	Leu	His	Val	Val	Pro	Val	Gly
			100					105						110	

Arg

<210> 1739

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1739

cgcgttattg aaaatgctgc tttttttact aaattaggac agcgtttaat cggcgcat  
 60  
 catcaagtga cggttgatgg atttgtttac cgtgttgata tgcggttacg cccttttggg  
 120  
 gagtctgggc cattggttag cacgtttaat tcaatagagg actattatca aaccatggg  
 180  
 cgagagtggg agtggtatgc catgggtaaa gcccggtgta ttggtgttga ggacgagtat  
 240  
 aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc  
 300  
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagtctg tcgcaagggg  
 360  
 ttaaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtggctcaa  
 420

<210> 1740

<211> 140

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1             5             10             15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20             25             30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35             40             45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50             55             60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
      65             70             75             80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85             90             95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100            105            110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115            120            125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130            135            140

```

&lt;210&gt; 1741

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1741

```

nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
60
gggcaggtcg acgtcgctcg ctccaaccgc cctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gcccacggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgc cggagtgcctc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgc tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccgc gctggtag
378

```

&lt;210&gt; 1742

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1             5             10             15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20             25             30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

35
40  
 Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly  
50
55

```
<210> 1743
<211> 4121
<212> DNA
<213> Homo sapiens
```

400> 1743					
atcacgtaca	actgcaagga	ggagttccag	atccatgatg	agctgctcaa	ggctcattac
60					
acgttggggc	ggctctcgga	caacaccctt	gagcactacc	tggtgcaagg	ccgctacttc
120					
ctggtgcggg	atgtcactga	gaagatggat	gtgctgggca	ccgtgggaag	ctgtggggcc
180					
cccaacttcc	ggcaggtgca	gggtgggctc	actgtgttcg	gcatgggaca	gcccagcctc
240					
tcagggttca	ggcgggtcct	ccagaaactc	cagaaggacg	gacataggga	gtgtgtcatc
300					
ttctgtgtgc	gggaggaacc	tgtgcttttc	ctgcgtgcag	atgaggactt	tgtgtcctac
360					
acacctcgag	acaagcagaa	ccttcatgag	aacctccagg	gccttggaac	cggggtcggg
420					
gtggagagcc	tggagctggc	catccggaaa	gagatccacg	actttgccca	gctgagcgag
480					
aacacatacc	atgtgtacca	taacaccgag	gacctgtggg	gggagcccca	tgctgtggcc
540					
atccatggtg	aggacgactt	gcatgtgacg	gaggaggtgt	acaagcggcc	cctcttcttg
600					
cagccccact	acaggtacca	ccgcctgccc	ctgcccagac	aaggaggatc	cctggaggcc
660					
cagttggacg	cctttgtcag	tgttctccgg	gagaccccca	gcctgctgca	gctccgtgat
720					
gccacggg	ctccccagc	cctcgtcttc	agctgccaga	tgggcgtggg	caggaccaac
780					
ctgggcatgg	tcctgggcac	cctcatcctg	cttcaccgca	gtgggaccac	ctccagcca
840					
gaggtgccc	ccacgcaggc	caagcccctg	cctatggagc	agttccaggt	gatccagagc
900					
tttctccgca	tggtgcccc	gggaaggagg	atggtggaag	aggtggacag	agccatcact
960					
gcctgtgccg	agttgcatga	cctgaaagaa	gtggtcttgg	aaaaccagaa	gaagttagaa
1020					
ggtatccgac	cggagagccc	agcccaggga	agcggcagcc	gacacagcgt	ctggcagagg
1080					
gcgctgtgga	gcctggagcg	atacttctac	ctgatcctgt	taaactacta	ccttcatgag
1140					
cagtacccgc	tggccctttgc	cctcagtttc	agccgctggc	tgtgtgcccc	ccctgagctg
1200					
taccgcctgc	ccgtgacgct	gagctcagca	ggccctgtgg	ctccgaggga	cctcatcgcc
1260					
aggggctccc	tacgggagga	cgatctggtc	tccccggacg	cgctcagcac	tgtcagagag
1320					

atggatgtgg ccaacttccg gcgggtgccc cgcatgccc tctacggcac ggcccagccc  
1380  
agcgccaagg ccctggggag catcctggcc tacctgacgg acgccaagag gaggctgcgg  
1440  
aaggttgtct ggggtgagcct tcgggaggag gccgtgttgg agtgtgacgg gcacacctac  
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1680  
acctaccacc gcatcccat gccggacttc tgtgcccccc gagaggagga ctttgaccag  
1740  
ctgctggagg ccctgcgggc cgccctctcc aaggaccag gcactggctt cgtgttcagc  
1800  
tgcctcagcg gccagggccg taccacaact gcgatggtgg tggtgtcct ggccctctgg  
1860  
cacatccaag gcttccccga ggtgggtgag gaggagctcg tgagtgtgcc tgatgccaag  
1920  
ttactaagg gtgaatttca ggtagtaatg aagggtgtgc agctgctacc cgatgggcac  
1980  
cgtgtgaaga aggaggtgga cgcagcgctg gacactgtca gcgagaccat gacgcccag  
2040  
cactaccacc tgcgggagat catcatctgc acctaccgcc aggcgaaggc agcgaaagag  
2100  
gcgcaggaaa tgcgagggt gcagctgcgg agcctgcagt acttgagcg ctatgtctgc  
2160  
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2280  
ggcttccccg agctggagag cggggaggac cagcccttct ccaggctgcg ctaccggtgg  
2340  
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2400  
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2520  
gagcggagtt gggagccttt ttagaaagaa ctttttatag gacagggaga cagcacagcc  
2580  
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2640  
ctcacaagg gcacactgct gtgtgtacct tgcagacagg ccggcggtca gcctccaagg  
2700  
ggctcactcc ccagttgcc aaacactgtg gatctctctg tcctcttctc ccctctctca  
2760  
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2880  
gtctggcagc ctgagggtggg tggaggggac agtgttctgg atagatctat tatgtgaaa  
2940

gcagcttcac ccagttttct ggactctcat gcccccatct ccgacctggg agacttcagg  
 3000  
 aatgacaacc taccagcct ggtggggctg gcaggatggg ggaggtttct caaggagctg  
 3060  
 gagacttcag ggagccctc tcatggggag gaaagagctt ccagggggcg aacgcagcac  
 3120  
 agaggaagag gcctgctcca cttgtctggg aacctgggca ggaggcacag aggaagccaa  
 3180  
 ggcttgagc tgcagggtccc ccggcatctc tctctgtccc ggcagcccag gatggcctgg  
 3240  
 tgccccacc tgctgcagca ggagcccaa ggagtgctag ctgaggggtg ttgctggggg  
 3300  
 ggtcctcatg gacagtgagg tgtgcaaggg tgactgagg gtggtgggag gggatcacct  
 3360  
 gggttccagg ccatccttgc tgagcatctt tgagcctgcc ttccgggtgg agcagaaaag  
 3420  
 gccagacct gctgagttag aggtgctggt gatccactgt ttccacacag cgggaaggct  
 3480  
 gctgggaaca ggtggcagag aagtgccatg ttgctgtga gccttcagc tcttcagct  
 3540  
 ggggactggg gcttctgaa acccaggagc tgaacagtga ggaggctgtc caccttgctt  
 3600  
 ggctcactgg gaccaggaaa gcctgtcttt ggtaggctc gtgtacttct gcaggaaaaa  
 3660  
 aaaaaaagga tgtgtcattg gtcattgat ttgaaaagg gaggaggccg aagttgttcc  
 3720  
 catttatcca gtattggaaa atatttgacc cccttggtg aattcttttg cagaactact  
 3780  
 gtgtgtctgt tctactacct ttcagggtta ttgtttttat ttttgcatag attaaagcgt  
 3840  
 ttttaatttct ttgcagacaa ggtctagatg cggagtcaga gatgggactg aatggggagg  
 3900  
 gatcctttgt gttctcatgg ttggctctga ctttcagctg tgttgggacc actggctgat  
 3960  
 cacatcacct ctctgcctca gtttcccat ctgtaaaatg ggagaataat acttgcttac  
 4020  
 ctacctcaca ggggtgttgt gaggattcat ttgtgatttt tttttttttt tttgtacaga  
 4080  
 gcttttaagc attaaaaaca gctaaatgtg aaaaaaaaaa a  
 4121

&lt;210&gt; 1744

&lt;211&gt; 796

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
1				5				10						15	
Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20					25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40					45			
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg



50		55		60	
Gln Val Gln Gly Gly	Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu				
65	70	75	80		
Ser Gly Phe Arg Arg	Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg				
	85	90	95		
Glu Cys Val Ile Phe Cys Val Arg Glu Glu Pro Val Leu Phe Leu Arg					
	100	105	110		
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu					
	115	120	125		
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu					
	130	135	140		
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu					
	145	150	155		160
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro					
	165	170	175		
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu					
	180	185	190		
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg					
	195	200	205		
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala					
	210	215	220		
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp					
	225	230	235		240
Ala His Gly Pro Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val					
	245	250	255		
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His					
	260	265	270		
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys					
	275	280	285		
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met					
	290	295	300		
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr					
	305	310	315		320
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln					
	325	330	335		
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly					
	340	345	350		
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr					
	355	360	365		
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu					
	370	375	380		
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu					
	385	390	395		400
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg					
	405	410	415		
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro					
	420	425	430		
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg					
	435	440	445		
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala					
	450	455	460		
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg					
	465	470	475		480
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp					

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<210> 1745
<211> 426
<212> DNA
<213> Homo sapiens
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1376

actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg  
 300  
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt  
 360  
 ctttactcag gtttgaatgg aagtgacaac aagtacacta aagtagaggc tggagtgtgc  
 420  
 tcgcga  
 426

<210> 1746  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1746  
 Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val  
 1 5 10 15  
 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp  
 20 25 30  
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu  
 35 40 45  
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile  
 50 55 60  
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala  
 65 70 75 80  
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe  
 85 90 95  
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala  
 100 105 110  
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser  
 115 120 125  
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg  
 130 135 140

<210> 1747  
 <211> 373  
 <212> DNA  
 <213> Homo sapiens

<400> 1747  
 nnaagctttt gtccacacag ataggaagta atcatggtca ctcaccgccc agaactgcat  
 60  
 atcaccgccc ctgaaggcgt gttggaggca cggcggggt cgctcctcaa ggacggcacg  
 120  
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc  
 180  
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttccagag  
 240  
 ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg  
 300  
 ttttttacct ccgtcaaggc cgacnaagac ggaaatccat cgggcagatg tcgccgacgg  
 360  
 caaagctacg cgt  
 373

<210> 1748  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1748  
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val  
 1 5 10 15  
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile  
 20 25 30  
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His  
 35 40 45  
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp  
 50 55 60  
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val  
 65 70 75 80  
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly  
 85 90 95  
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr  
 100 105 110  
 Ala

<210> 1749  
 <211> 853  
 <212> DNA  
 <213> Homo sapiens

<400> 1749  
 cccagcaggc aaagagagag gcctccctgg ctctcagtggt caggggagcc gcgttccttc  
 60  
 ccagggtctgg agcagaggac cacaaggcag cagaaagcgc ggggtccagat gagggccagg  
 120  
 aaggggagga gagtgagggc caagaacgag ccttaaggga gcagtcccaa gctggagcca  
 180  
 cccagggtctg ggtctgggag tctcagtggt ccacttggtc cagggttaggg ggcttgcttc  
 240  
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc  
 300  
 caggatgtac aaggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg  
 360  
 tggatgcctg tgggcatggc tttctctggg gaccccatc ctgtcagtag caaccctggc  
 420  
 agtgtccgga gcggctctag acaactttgg tcataggaac tctggaggtg ggttctggtc  
 480  
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccact  
 540  
 aggttgctc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc  
 600  
 acccactgtg tactggcccc gctcaggccg gcctggcaca ccgttgctg ctggcggtc  
 660  
 tcatggggaa gcgcctgggc actggggatt gcttggtggc cactcaactc ttggggcagt  
 720

ggccgtaacc ctagtttgcc tgaggccctt atgtccctt atgttcctgg tactggagct  
 780  
 tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccac ctgggaggcc  
 840  
 aggacactga gga  
 853

<210> 1750  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<400> 1750  
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp  
 1 5 10 15  
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu  
 20 25 30  
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro  
 35 40 45  
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala  
 50 55 60

<210> 1751  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1751  
 ggccgcatcc cgcactctggg ccgatggcga atgggcaatt tcagtcgcag acagggacat  
 60  
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg  
 120  
 gcattgtctt ccctgtcagg aggagagagg caacgggtac agctgggtcg tgccttggca  
 180  
 caggagcccc agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag  
 240  
 atcgacctcc tggagcgggt ccgaggactc ggcttgacga cggtcaccgt cattcatgac  
 300  
 ctgcacttgg ctgccgccta cgccgacgac ctcatcgtgc tcgactcggg tcgcatggtt  
 360  
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttgggtgc  
 420  
 gacggtgagg ttgtgtctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga  
 480  
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c  
 531

<210> 1752  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1752  
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

1	5	10	15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr			
	20	25	30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly			
	35	40	45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu			
	50	55	60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln			
65	70	75	80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr			
	85	90	95
Val Ile His Asp Leu Asp Leu Ala Ala Ala Tyr Ala Asp Asp Leu Ile			
	100	105	110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val			
	115	120	125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val			
	130	135	140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr			
145	150	155	

&lt;210&gt; 1753

&lt;211&gt; 920

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1753

gagacagtgg agaggctggg tcagtcacct gccaggaca ccccggtcct ggggccttgc  
60  
tgggaccgca tggctctggg gactcagggc cgcctgctgc tggacagga ttccaaggac  
120  
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc  
180  
ccaccccgaga gaaggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac  
240  
cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc  
300  
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatcccctgc agatgctgtt  
360  
gggggcntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg  
420  
gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa  
480  
gatgggaccc ttctctgcaa cgcctgtggg atcaggtaca agaaatacgg cactcgtgc  
540  
tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt  
600  
ggagtgtccc tggaccccat tcaggaaggt taaaccagc ttcaccctgc tgagctgctg  
660  
cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg  
720  
ggaaagagcc ggctgcctc ctctctgcca tctccagatt caaggatccc gggggaagac  
780  
ccaggcctca ggtggcagag cctgctaggg gtcaccagcc cttctccag tcagccttgg  
840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata  
 900  
 aagtacagag atatgccgag  
 920

<210> 1754  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 1754  
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val  
   1                  5                  10                  15  
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu  
                   20                  25                  30  
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys  
                   35                  40                  45  
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg  
                   50                  55                  60  
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp  
   65                  70                  75                  80  
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser  
                   85                  90                  95  
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser  
                   100                  105                  110  
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu  
                   115                  120                  125  
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg  
                   130                  135                  140  
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu  
   145                  150                  155                  160  
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr  
                   165                  170                  175  
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln  
                   180                  185                  190  
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln  
                   195                  200                  205  
 Glu Gly  
   210

<210> 1755  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1755  
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgc tggagtcag  
   60  
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag  
   120  
 ttggttgga cagatcttct accaacaatg ccttgactt gcctgcaaat agttgtagat  
   180  
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt  
   240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta  
 300  
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaatcgg  
 360  
 ccattccacc ctgcaccgcc atttgattgc ttgtgggttat gtctttatgc aaaattgggt  
 420  
 gaactatgtg tggatcc  
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1				5					10					15	
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25					30		
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
		35				40						45			
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50					55					60				
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85						90					95	
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
			100					105					110		
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
		115					120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat  
 60  
 gcgcacagca tccatggcac caaccctcaa tatctgggtg agaagatcat tcgaacgcga  
 120  
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc  
 180  
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca  
 240  
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta  
 300  
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg  
 360  
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga  
 420  
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt  
 480



gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc  
 540  
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg  
 600  
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc  
 660  
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca  
 720  
 ctgcgctaca ggaggagtag gagccgtct cccagaaggc ggagtcgac tccaaaagg  
 780  
 agaagccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc  
 840  
 aggtcccgag atcggcgga cagatcccg tccaagtccc caggtcatca ccgtagtcac  
 900  
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg  
 960  
 agagggaaatg agtaatggac tcagtttggg tttagtcac atggcctcct gtggatataa  
 1020  
 ggatatctgt atgtggaagg attaatctt cccccaggca gctataagaa tatttttagt  
 1080  
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc  
 1140  
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta  
 1200  
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc  
 1260  
 tgatgaccct ttcccttttt attaaaccgg acacacc  
 1297

&lt;210&gt; 1758

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5				10					15		
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
		35					40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85						90				95		
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
			100					105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
		115					120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130				135						140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

[illegible]

```
<210> 1759
<211> 324
<212> DNA
<213> Homo sapiens
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<400> 1759
aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
60
ggcctgggca gacacaatta ttgtcggaat ccagatggtg atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324
```

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<210> 1760
<211> 108
<212> PRT
<213> Homo sapiens
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```

<400> 1760
Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
 1             5             10             15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
      20             25             30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
      35             40             45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

```

<210> 1761  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1761
ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat tgtaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgca gtaagacccc
240
acagtggggc caggtggtct tgcaccctgt attcccactt tggctggggc agcccagagt
300
ccagggcagc aggtaatgcc ccagccatgc ccactcggtc ctattggatc c
351

```

<210> 1762  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1      5      10      15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20      25      30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35      40      45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50      55      60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65      70      75      80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85      90      95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100      105

```

<210> 1763  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 1763

gcgcgccggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag  
 60  
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagaccttcc  
 120  
 accatccccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag  
 180  
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc  
 240  
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg  
 300  
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcy accggt  
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1			5						10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25				30			
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40				45				
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65				70					75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85					90					95		
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cggccgcatt cttcgtgact ggcgctccgc cgccggtgca aaagtgtcag gaaataccag  
 60  
 tcatgactat gtttagccgc acctctctgc agtatgcat cgttctggca gcgctgggag  
 120  
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg  
 180  
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcggcc  
 240  
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac  
 300  
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgcccgaag ctgatcg  
 357

<210> 1766  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1766  
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala  
 1 5 10 15  
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr  
 20 25 30  
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala  
 35 40 45  
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser  
 50 55 60  
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln  
 65 70 75 80  
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu  
 85 90 95  
 Leu Ile

<210> 1767  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 1767  
 nnncgccgac ggccgccatg acgcaccgca ttgacgtgaa ccagggcgac gatgccaacc  
 60  
 ccggccaaca cgccaggctg cttgacgccg ccagccaacc cgacgaacgc cccaccaaga  
 120  
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg  
 180  
 agggacaaac ccacctggag tccgtcgctg tgcattgccc ccaccacgct caacgtcgtc  
 240  
 aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn  
 297

<210> 1768  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 1768  
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn  
 1 5 10 15  
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile  
 20 25 30  
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr  
 35 40 45  
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn  
 50 55 60  
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

&lt;210&gt; 1769

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1769

caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg  
 60  
 cagggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag  
 120  
 accgttgaga tcctccatac tcccgcgacc acgcatcgat gggtcgcccgt ccaggcattg  
 180  
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa  
 240  
 atcctcgcct ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag  
 300  
 ggcgctcgca ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt  
 360  
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgcccag  
 420  
 gccgcctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc  
 474

&lt;210&gt; 1770

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1770

His	His	Ala	Gly	Ser	Val	Arg	Arg	Ile	Arg	Val	Gly	Glu	Ser	Val	Leu
1				5				10						15	
Val	Thr	Asp	Gly	Gln	Gly	His	Ala	Val	Arg	Gly	Pro	Ala	Ile	Glu	Val
		20						25						30	
Thr	Lys	Gly	Ser	Val	Ser	Val	Glu	Thr	Val	Glu	Ile	Leu	His	Thr	Pro
		35					40					45			
Ala	Thr	Thr	His	Arg	Trp	Val	Ala	Val	Gln	Ala	Leu	Pro	Lys	Ser	Asp
		50				55					60				
Arg	Ala	Glu	Leu	Ala	Val	Ala	Thr	Leu	Thr	Glu	Met	Gly	Val	His	Glu
65				70						75				80	
Ile	Leu	Ala	Trp	Gln	Ala	Asp	Arg	Ser	Ile	Val	Arg	Trp	Lys	Gly	Asp
				85					90					95	
Lys	Gln	Ala	Lys	Gly	Val	Ala	Arg	Trp	Gln	Ala	Ala	Ala	Arg	Glu	Ala
			100					105						110	
Thr	Lys	Gln	Ser	Arg	Arg	Phe	Leu	Val	Pro	Gln	Val	Glu	Leu	Ala	Gln
		115					120					125			
Thr	Arg	Glu	Val	Val	Lys	Arg	Ile	Cys	Asn	Ala	Gln	Ala	Ala	Tyr	Val
		130				135					140				
Leu	His	Glu	Ser	Ala	Ser	Glu	Pro	Leu	Val	His	Gln	Glu	Leu		
145					150					155					

&lt;210&gt; 1771

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat  
 60  
 taataacagc ggggtgctgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag  
 120  
 caacaggcctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt  
 180  
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata  
 240  
 cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac  
 287

&lt;210&gt; 1772

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10				15			
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65			70					75				80			
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85					90							

&lt;210&gt; 1773

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1773

accggtgagt tctacgtccc ggtaaccac ctcgagggtg aacaggcgca cctcgacgtc  
 60  
 ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc  
 120  
 cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag  
 180  
 acgatcatcg atgagttcat cgctcgggt ggctccaagt ggggtcagaa gtcgggagtc  
 240  
 gtgctgtgctg tgcgcacggg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg  
 300  
 gagcgcttcc tcaatctatg cagtgaagac gctttggcgg tctgccagcc ctcgaccccg  
 360  
 gcaagctaca gccatttatt gcgtcagcac gcg  
 393

<210> 1774  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 1774  
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala  
 1 5 10 15  
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly  
 20 25 30  
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp  
 35 40 45  
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp  
 50 55 60  
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val  
 65 70 75 80  
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser  
 85 90 95  
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu  
 100 105 110  
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg  
 115 120 125  
 Gln His Ala  
 130

<210> 1775  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 1775  
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa  
 60  
 cgggaggggca tcgctaggga ggggtggggc ggcccggctt cgatgcagcc atgtgggagg  
 120  
 gccactctca gagaccccc gccttccttg ccacccccac cccagagggg aagctggagc  
 180  
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggctttga  
 240  
 gcacctctgt tcctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat  
 300  
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg  
 360  
 aacaccggt  
 369

<210> 1776  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 1776  
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln



```

      1             5             10             15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20             25             30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35             40             45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50             55

```

&lt;210&gt; 1777

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1777

```

agcttcttat cactatcctt tagtgctttt tggcttacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcatctatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattgtt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

&lt;210&gt; 1778

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1778

```

Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
1             5             10             15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20             25             30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35             40             45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50             55             60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
      65             70             75             80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85             90             95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100            105            110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115            120

```

&lt;210&gt; 1779

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1779

ccatgtgtgt gtatatgttc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt  
 60  
 atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg  
 120  
 gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtagggt gtgtatatct  
 180  
 gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac  
 240  
 ctgtgtatat tggaaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt  
 300  
 atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg  
 345

&lt;210&gt; 1780

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1780

Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr  
 1 5 10 15  
 Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr  
 20 25 30  
 Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp  
 35 40 45  
 Val Cys Ile Cys Val Tyr Met  
 50 55

&lt;210&gt; 1781

&lt;211&gt; 349

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1781

nacgcgtcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcggaagag  
 60  
 aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct  
 120  
 gatgtgaaca caacgcaaac tgggttcaagc gccacgcca ttacacctgt acccttactg  
 180  
 ccagtgacac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac  
 240  
 aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta  
 300  
 cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga  
 349

&lt;210&gt; 1782

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
          20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
          35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
          50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
          85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
          100          105

```

&lt;210&gt; 1783

&lt;211&gt; 1829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1783

```

gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcgaaaaat gggtgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatg cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgtcc ttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag  
 960  
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga  
 1020  
 gcttcacaga cctctgggtga acaaattcag ccttcagcta cgatccagga aacacagcaa  
 1080  
 tggctgtctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc  
 1140  
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt  
 1200  
 cggtcttata attcactgaa gtcaaggctcg gtttagacccc gtttaaccat ctatgtctgc  
 1260  
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc  
 1320  
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttgggaaga aatgattgcc  
 1380  
 tcagaagttg ctcgaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag  
 1440  
 gtttacagac aggggtccac cggtattcac attcttggtta gtgatcaggt aaatcaaadc  
 1500  
 atttggtttt ccttttcaga ctggtattta cttttatata tgtaattgta gaactgtaga  
 1560  
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc  
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 1680  
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 1740  
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc  
 1800  
 cttttgtcta ttatttgatg actaattta  
 1829

&lt;210&gt; 1784

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
	50				55					60					
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90					95		
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100				105						110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

115					120					125					
Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp
130					135					140					
Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp
145					150					155					
Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr
165					170					175					
Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg
180					185					190					
Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp
195					200					205					
His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly
210					215					220					
Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr
225					230					235					
Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu
245					250					255					
Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu
260					265					270					
Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser
275					280					285					
Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala
290					295					300					
Tyr	Val	Asn	Asn	Ser	Pro	Ser	Pro	Ala	Pro	Thr	Phe	Thr	Ser	Pro	Gln
305					310					315					
Gln	Ser	Thr	Cys	Ser	Val	Pro	Asp	Ser	Asn	Ser	Ser	Ser	Pro	Asn	His
325					330					335					
Gln	Gly	Asp	Gly	Ala	Ser	Gln	Thr	Ser	Gly	Glu	Gln	Ile	Gln	Pro	Ser
340					345					350					
Ala	Thr	Ile	Gln	Glu	Thr	Gln	Gln	Trp	Leu	Leu	Lys	Asn	Arg	Phe	Ser
355					360					365					
Ser	Tyr	Thr	Arg	Leu	Phe	Ser	Asn	Phe	Ser	Gly	Ala	Asp	Leu	Leu	Lys
370					375					380					
Leu	Thr	Lys	Glu	Asp	Leu	Val	Gln	Ile	Cys	Gly	Ala	Ala	Asp	Gly	Ile
385					390					395					
Arg	Leu	Tyr	Asn	Ser	Leu	Lys	Ser	Arg	Ser	Val	Arg	Pro	Arg	Leu	Thr
405					410					415					
Ile	Tyr	Val	Cys	Arg	Glu	Gln	Pro	Ser	Ser	Thr	Val	Leu	Gln	Gly	Gln
420					425					430					
Gln	Gln	Ala	Ala	Ser	Ser	Ala	Ser	Glu	Asn	Gly	Ser	Gly	Ala	Pro	Tyr
435					440					445					
Val	Tyr	His	Ala	Ile	Tyr	Leu	Glu	Glu	Met	Ile	Ala	Ser	Glu	Val	Ala
450					455					460					
Arg	Lys	Leu	Ala	Leu	Val	Phe	Asn	Ile	Pro	Leu	His	Gln	Ile	Asn	Gln
465					470					475					
Val	Tyr	Arg	Gln	Gly	Pro	Thr	Gly	Ile	His	Ile	Leu	Val	Ser	Asp	Gln
485					490					495					
Val	Asn	Gln	Ile	Ile	Cys	Phe	Ser	Phe	Ser	Asp	Trp	Tyr	Leu	Leu	Leu
500					505					510					
Tyr Met															

<210> 1785

<211> 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca  
 60  
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt  
 120  
 acactcacia tgccctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggg  
 180  
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa  
 240  
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac  
 300  
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt  
 360  
 gatggccttg tatctggtat c  
 381

&lt;210&gt; 1786

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20				25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50				55					60					
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70			75					80			
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
		85					90					95			
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100					105					110			
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
	115					120					125				

&lt;210&gt; 1787

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt  
 60  
 agggtcacct aacaaggaga tgagaacaaa ctttaaattct atctctctaa ggaatttgga  
 120  
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag  
 180

tacaggggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct  
 240  
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg  
 294

<210> 1788  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1788  
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser  
 1 5 10 15  
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn  
 20 25 30  
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile  
 35 40 45  
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys  
 50 55 60  
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu  
 65 70 75 80  
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu  
 85 90

<210> 1789  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 1789  
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca  
 60  
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc  
 120  
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc  
 180  
 gacctgctcc ccgggggtctc tcccgaggc aggtctcctc gccgagtctc cgaaaagggg  
 240  
 cggtcgtggc ggccctggcg ccagctggg caacgcttcg tggatatca ccgcttctct  
 300  
 ctgttggtgcc cagcgccccg actgaagatc cggatcttca gtccttggcg cgc  
 353

<210> 1790  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1790  
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro  
 1 5 10 15  
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His  
 20 25 30  
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

```

&lt;210&gt; 1791

&lt;211&gt; 355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1791

```

aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
  60
acccccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
 120
gctttggatc aagccaatgc atgtatcccc taacacacccc atgctttatg tggtccttgc
 180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
 240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
 300
ccactccgat tcccatccccc tctgctgctc tctctctct cctcccttca cgcgt
 355

```

&lt;210&gt; 1792

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1792

```

Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1              5              10              15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20              25              30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35              40              45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
      50              55              60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
  65              70              75              80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85              90              95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100              105

```

&lt;210&gt; 1793

&lt;211&gt; 510

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatata  
 60  
 caccctctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag  
 120  
 agtcagccag acccttagca aacaccatag gggatcatctc aatctcttct ccaacttcac  
 180  
 cttcttctct ggagatgaat cctgacaaca cctcagggtc gaggcagaag tcggtggagg  
 240  
 ccgagccgtg ctcatgttg atggtgcacc gatacacacc gcagtctacg ggggaggcct  
 300  
 gcacgatggc caaggccgcc ggccctcat cccctgcgt cctgccacc tcgcccactg  
 360  
 ggcgtgatc cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc  
 420  
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct  
 480  
 gtggggcttt cagcaggtct ttggctttcc  
 510

&lt;210&gt; 1794

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25				30			
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50				55					60					
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65					70				75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90						95	
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
		100						105					110		
Pro	Thr	Gly	Arg												
		115													

&lt;210&gt; 1795

&lt;211&gt; 386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttcctt gggctgatca  
 60  
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccccttt  
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttgc  
 180  
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca  
 240  
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggc  
 300  
 tctccagggt gagagctcca tgagggcacc aatttttgtc tgtttagctg tgtcctcaaa  
 360  
 gcaaggaagg gttgatccgg tctaga  
 386

<210> 1796

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1				5					10					15	
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Ile	Lys	Gln	Lys	Ile	Ala	Asp
		20					25						30		
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40					45			
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50					55					60				
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65					70					75					80
Glu	Val	Thr	Gln	Ser	Ile										
					85										

<210> 1797

<211> 348

<212> DNA

<213> Homo sapiens

<400> 1797

aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac  
 60  
 cggaatttgc cgatgtcatt gatcaggtca tctgtctggg ctgcgcgcag cagggtctgc  
 120  
 gtgccgctaa tttgttgggc ccatttgcgt ggcgcgcac cgtcaaatgg tgtatcacag  
 180  
 cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttggagcg ccatcaactc  
 240  
 acagatggac aacctggtgt tgccggtgac ctccgcaatt ttaccgggaa tgacccatgt  
 300  
 ggcggtggat tacctggggc attgttcggt attgtacagc ccacgcgt  
 348

<210> 1798

<211> 108

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
 20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
 35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
 50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
 65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
 85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
 100          105

```

&lt;210&gt; 1799

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1799

```

acgcgtcgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagtctg caggaatgag caccagggcg
120
tcgattattt cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacgggttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcgtg ctcgtcctga tgagtatctt catgcttacc
360
gtgcac
366

```

&lt;210&gt; 1800

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
 20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
 35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
 50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
 65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

	85		90		95
His Val Gly	Gln Gly Val	Pro Lys Trp	Ala Pro Ile	Leu Val Leu	Val
	100		105		110
Leu Met Ser	Ile Phe Met	Leu Ile Val	His		
	115		120		

<210> 1801  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

<400> 1801  
 aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc  
 60  
 actaagccgg cagaacaggg cggattgggt ttcgatcctg ccagcatctg ggtgacggtc  
 120  
 cttggacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg  
 180  
 cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg  
 240  
 catatggggg ttcccggccc cggcggcccg tgctcgaaa tctacatcga tcgtggccca  
 300  
 gcctatggtc ccgacggtgg tccagaagca gatgaggacc gttaccttga gatctggaac  
 360  
 ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca  
 420  
 ggcccatgtc gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgcttaccta  
 480  
 ctccagggcg tcgacaatat gtacgagact gaccaggtat tccctgtcat tgagaaagcg  
 540  
 tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc  
 597

<210> 1802  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

Asn Phe Ser	Phe Gly Asp	Tyr Phe Lys	Asn Glu Ala	Ile Gln Tyr	Ala
1	5	10		15	
Trp Glu Leu	Val Thr Lys	Pro Ala Glu	Gln Gly Gly	Leu Gly Phe	Asp
	20	25		30	
Pro Ala Ser	Ile Trp Val	Thr Val Leu	Gly Pro Gly	Phe His Pro	Asp
	35	40		45	
Tyr Pro Glu	Gly Asp Ile	Glu Ala Arg	Glu Ala Trp	Arg Ala Ala	Gly
	50	55		60	
Ile Pro Asp	Glu Gln Ile	Gln Gly Arg	Ser Leu Lys	Asp Asn Tyr	Trp
	65	70		75	80
His Met Gly	Val Pro Gly	Pro Gly Gly	Pro Cys Ser	Glu Ile Tyr	Ile
	85	90		95	
Asp Arg Gly	Pro Ala Tyr	Gly Pro Asp	Gly Gly Pro	Glu Ala Asp	Glu
	100	105		110	
Asp Arg Tyr	Leu Glu Ile	Trp Asn Leu	Val Phe Glu	Thr Glu Asp	Leu

```

      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

```

&lt;210&gt; 1803

&lt;211&gt; 708

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1803

```

cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcactctgg ccctcatctc cgagatcggc accggtgggg gacaaggcca tatggtcgag
120
tatcgcgggc aggccatcga gaagatgtcg atggaggggc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatt gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
300
cgcaactctg gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgcccg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg acccgcacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

&lt;210&gt; 1804

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1804

```

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1              5              10              15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
      20              25              30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

```

<210> 1805
<211> 833
<212> DNA
<213> Homo sapiens
<400> 1805
nccgcagtgg tgtgggacaa gaacaccggg gagccgggtt ataacgccat cgtgtggcag
60
gacacgcgca ctcaaaagat ctgtaacgaa ctagctgggtg acaaggggcgc cgaccgctac
120
aaggagatct gtggtctggg cctgtcgacc tatttctctg gccogaaggt caaatggatt
180
ctcgacaacg ttgaggggagc ccggtcgagg gccgaggccg gcgatctgct cttcggtaac
240
atggacactt ggggtgctgtg gaacctgact ggcggtacta acggtggcgt gcacatcacc
300
gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360
tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtccctctcc
420
gagatctacg gctatggctg caagaacggc ctgctgatcg ataccccgat ctccggcatt
480
cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag
540
aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
600
gagaacggtc tgctgaccac cgtctgctac aagattgggtg accagcccac cgtctatgcc
660

```

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgca caacctcaag  
 720  
 atgttcgaga cgcggcgca aatcgaagcc ctgcgaaca cgcgcgagga caatgggtggc  
 780  
 gcctactttg tgccggcctt ctctggcctg ttcgcgccgt actggcgctcc gga  
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1				5					10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50					55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75				80	
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
			85					90					95		
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
		115					120					125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
		130					135					140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155				160	
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
			165						170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
			180					185					190		
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
		195					200						205		
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
	210					215					220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235				240	
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
			245					250					255		
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
		260						265					270		
Pro	Tyr	Trp	Arg	Pro											
		275													

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807  
 nnntatcggc aaggtggctg aaatggctct tgactatgtc aacggtgaca cgtgcgcgcg  
 60  
 gaccgcccc ttcatttgct gtttgacgtc gacgcgatgg accctagcgt ggccccgagc  
 120  
 acaggcacac cgggtgcgtg tggctctcac ttccgagaag gccactacat atgcgagggc  
 180  
 gtagctgaga ccggctcgtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa  
 240  
 aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcgttc ggcgctgggg  
 300  
 gagacgcttc tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc  
 360  
 cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcgggttt gagcacgcgt  
 420

<210> 1808  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 1808  
 His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala  
 1 5 10 15  
 Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly  
 20 25 30  
 Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr  
 35 40 45  
 Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu  
 50 55 60  
 Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg  
 65 70 75 80  
 Ser Ala Leu Gly Glu Thr Leu Leu  
 85

<210> 1809  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 1809  
 nnaccggtga tcgcatcggg gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc  
 60  
 cagaccggtg tcacgcatgc gtatgcctc gggcatggca gcctcctcgt gatgcggggc  
 120  
 cccaccagc ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc  
 180  
 gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc  
 240  
 ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga  
 300  
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn  
 340



<210> 1810  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 1810  
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp  
 1 5 10 15  
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His  
 20 25 30  
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His  
 35 40 45  
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr  
 50 55 60  
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg  
 65 70 75

<210> 1811  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1811  
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttatacttca  
 60  
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttgttg  
 120  
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag  
 180  
 cagggtactgg aaaagaagg cgatgcactg ctacacgcag gtcagctcat ggaggccgctc  
 240  
 gagtgtctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac  
 300  
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa  
 360  
 caagctcgcg tgctctgtct catgctggct acttggtc tttgaattgta tgtggccgcc  
 420  
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag  
 480  
 acacttgagc ggcacatga  
 500

<210> 1812  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1812  
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp  
 1 5 10 15  
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu  
 20 25 30  
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
      50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
      65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100             105             110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115             120             125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130             135             140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
      145             150             155             160
Thr Leu Glu Arg His His
      165

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&lt;210&gt; 1813

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1813

```

tctagagccg ttgtgatcgg tatccatggt tggatgggggt tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcctccctat ggtcattctg gggccaggcg ctctgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

```

&lt;210&gt; 1814

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1814

```

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
1      5      10      15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20      25      30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35      40      45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815  
 <211> 303  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1815
ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
60
cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgatc tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtgaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1              5              10              15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20              25              30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35              40              45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
50              55              60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65              70              75              80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85              90              95
Gly Thr

```

<210> 1817  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt cgatgcgtcg  
 60  
 catgcgcttg agcccacacg cgatggcaca cttcaggtca ttcacgcaa gacatggatc  
 120  
 ccgcgctcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt  
 180  
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg  
 240  
 tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac  
 300  
 ttccagcagc gataccccta atcaaaactcc tgtgtgggcg gcgtgtcatg tactactgtc  
 360  
 acttccctga caaagaaatc agcgtgtctc tggctcgaca gcgaggcacg cgt  
 413

&lt;210&gt; 1818

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1				5					10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
		20						25				30			
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
	35					40						45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50				55					60					
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	
Tyr	Arg	Ala													

&lt;210&gt; 1819

&lt;211&gt; 343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1819

ggatccaaga gtggggcatc aggaacatgc catggttgctc gtggtgctgg aatgagaaca  
 60  
 atcacaagac agataggcct tggcatgac caacagatga aactgtttg ccctgaatgc  
 120  
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaacaaa  
 180  
 gtagtccagg agaagaagg gttagagggt catgtggaga aaggaatgca acataacca  
 240  
 aagattgtat tccagggtca ggctgatgaa gtcctgata cgggtacagg agacattgtt  
 300  
 tttgtcttgc aacttaaaga ccatccaaaa ttttaagagga tgt  
 343

&lt;210&gt; 1820

<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1820  
 Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala  
 1 5 10 15  
 Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln  
 20 25 30  
 Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser  
 35 40 45  
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu  
 50 55 60  
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln  
 65 70 75 80  
 Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr  
 85 90 95  
 Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys  
 100 105 110  
 Arg Met

<210> 1821  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

<400> 1821  
 aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat  
 60  
 gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag  
 120  
 gcccgggaaa agttgctcgc caaggaggcc gccagcgga tgacctagat tgtctactgc  
 180  
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa  
 240  
 tctagtttca tatgtttctg tccaccagac catgtttaga agctt  
 285

<210> 1822  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 1822  
 Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn  
 1 5 10 15  
 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly  
 20 25 30  
 Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys  
 35 40 45  
 Glu Ala Ala Gln Arg Met Thr  
 50 55

<210> 1823  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 1823  
 ngttggctgc tgttgctggg cgttctgtcc ctgacgggct gcgcccgttc cgatgcgctg  
 60  
 tggggcgctgg tcgataagct ctgcatggcc aactatcagc aaaagcgaga tccggccccg  
 120  
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggct ttagcgtgct gcaaaacccg  
 180  
 cgttatccct atcatttcat tctggtgccg acggcgccgc tttccggcat tgaaagcccg  
 240  
 ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttaccgg  
 300  
 ctggccgccc agtatggcgg gccgggtgccg gacgacaggc tgggcatggc gatcaactcc  
 360  
 gcttacggcc gcagccagaa ccaattg  
 387

<210> 1824  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1824  
 Xaa Trp Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg  
 1 5 10 15  
 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr  
 20 25 30  
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln  
 35 40 45  
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr  
 50 55 60  
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro  
 65 70 75 80  
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu  
 85 90 95  
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp  
 100 105 110  
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln  
 115 120 125  
 Leu

<210> 1825  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1825  
 gtgcacggac gaccgcgcac agggactcgt gtgccgcgca tgggacgacg gcgatgcgtg  
 60

tgcgtgcata ccgctgctct ggcaggctcgt gcgtgcgatt gtcgccgaca catcggcggc  
 120  
 ttggcacgtc gtgattgggc gcctaggcac catgtcgcag gccgacatgg acatgtgggc  
 180  
 gtcgtgcctc gatacgcgcg acccttcctg ctctcggtag gccttggtgtg cctggagcgc  
 240  
 gatgcctggc ctacgggcac gcgatgcac ggtggtctac ctgtcggaca tgccgctggg  
 300  
 tctggcctca ggtgcgtggc cgatcccgct gcctcgcctc gcgttatgtg tctgccggcg  
 360  
 cctatgccat tcattcctgt cagctacgtc acctggctga tctcgacgcg gct  
 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
1				5				10				15		
Arg	Ala	Cys	Asp	Cys	Arg	Arg	His	Ile	Gly	Gly	Leu	Ala	Arg	Arg
		20					25				30			
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly
		35					40				45			
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Val
	50					55				60				
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly
65				70				75			80			
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp
			85					90				95		
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe
			100					105				110		
Ser	Cys	Ser	Tyr	Val	Thr	Trp	Leu	Ile	Ser	Thr	Arg			
			115				120							

<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

ctggccaact gggtgccgga cctgttcattg aagcgcgtcg aagccgacca ggaatggctg  
 60  
 ctgttcgacg cgcgcgtggt gccggagttc accgacctgt tcggcgaagc cttcgaagcc  
 120  
 gcctacctgc aggcgaagc gcagggaag gccaacgca cgatctctgc ccgcaagctg  
 180  
 tacgcccga tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac  
 240  
 aagtgaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac  
 300  
 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg  
 345

<210> 1828  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1828  
 Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp  
 1 5 10 15  
 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp  
 20 25 30  
 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln  
 35 40 45  
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met  
 50 55 60  
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp  
 65 70 75 80  
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile  
 85 90 95  
 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp  
 100 105 110  
 Glu Thr Ala  
 115

<210> 1829  
 <211> 4457  
 <212> DNA  
 <213> Homo sapiens

<400> 1829  
 attccaatgg ttgtgtctga ttttgatctt ccagaccaac agatagaaat acttcagagt  
 60  
 tctgactcgg gatgttcaca gtcctctgct ggggacaact tgagttacga agttgatcct  
 120  
 gaaaccgtga atgccaaga ggattctcaa atgccaagg aaagctcccc agatgatgat  
 180  
 gttcaacagg tagtatttga cctgatatgt aaagttgtaa gtggcctcga agtggaatct  
 240  
 gcatcagtta catctcaatt agaaattgaa gctatgcccc caaagtgcag tgatatagat  
 300  
 ccagatgaag agacgattaa aattgaagat gactccattc gacagagtca gaatgctttg  
 360  
 ctgagtaatg aaagttctca gtttctgtct gtgtctgcag agggaggcca tgagtgtgtg  
 420  
 gcaaattgaa tctccaggaa tagctcctca ccttgtattt caggaaccac acacactctt  
 480  
 catgactctt ctgttgcttc catagaaacc aaatctagac aaaggagtca cagtagtatt  
 540  
 caattcagct tcaaagaaaa attatcagaa aaagtttcgg agaaggaaac aatagttaag  
 600  
 gagtcaggta aacaaccagg agcaaaacct aaagtaaaac ttgccagaaa aaaggatgat  
 660  
 gacaagaaaa aatcttcaaa tgaaaaactc aaacaaacca gtgtattctt cagtgtatgg  
 720



ctggatttag agaactggta tagctgtgga gagggagaca tttctgaaat tgagagtgc  
780  
atgggttctc caggatctcg aaaatctccc aatttcaaca ttcacctct ctatcaacat  
840  
gtgctcctgt atctccagtt gtatgattca tccaggactt tgtatgcttt ctctgccatc  
900  
aaagccatct tgaaaactaa ccttatagct tttgtaaatg ccatttcaac tactagtgt  
960  
aataatgcat atactcctca gttgtctctc cttcagaatc tattggccag acaccggatt  
1020  
tctgttatgg gcaaagattt ttatagtcac attccagtgg actcaaatca taacttccgg  
1080  
agttctatgt acatagaaat tcttatttct ctctgcttat attacatgcg tagccattac  
1140  
ccaactcatg tcaaggttac tgcacaagat ttaataggca atcgaaacat gcaaagtatg  
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1260  
aagggttcc ctagttttat ttctgatatg ttatctaagt gcaaagttca gaaagtgatt  
1320  
cttcattgtt tgctgtcatc tatctttagt gctcagaaat ggcatagtga aaaaatggca  
1380  
ggtaagaacc tggttgctgt ggaagaaggt ttctcagagg acagccttat taatttctca  
1440  
gaggatgaat ttgacaatgg cagcacgttg cagtcacaac ttcttaaggt gcttcagagg  
1500  
ctgattgttc tagaacacag agtaatgact attcctgaag agaatgaaac aggttttgat  
1560  
tttgtgtat ctgacttaga acacatcagt ccccatcaac ccatgacttc tcttcagtat  
1620  
ttgcatgtc agccaatcac atgtcaaggc atgttcctct gtgcagtgat acgagctttg  
1680  
catcagcact gtgcatgtaa gatgcacca caatggattg gtttaatcac atctactctg  
1740  
ccttacatgg gaaaagttct gcagagagtg gttgtttctg tgacactaca actgtgcaga  
1800  
aatttagata atctaattca gcagtacaaa tacgaaacag gattatctga tagtaggcct  
1860  
ctgtggatgg catcaattat tccaccagat atgattctta ctcttttgga agggattaca  
1920  
gccattatcc attactgttt gttggatcca actacacagt atcaccaact tttggtcagt  
1980  
gtagaccaga aacacttggt tgaagcacgc agtggaatcc tctcaatcct tcatatgatc  
2040  
atgtcctctg tgacactgct ttggagcata ctgcatcaag ctgattcttc agaaaagatg  
2100  
actattgccg catccgcatc tcttaccact attaattctg gagctacaaa gaacttgaga  
2160  
caacagattc ttgaattggt gggccccatt tcaatgaatc atgggtgtca ctttatggct  
2220  
gccattgcat ttgtgtggaa tgaaagaaga cagaataaaa caaccaccag gaccaaggtc  
2280  
attcctgcag ccagtgaaga acagctttta ttagtggaat tggttcgttc aatcagtgtc  
2340

atgagagcag aaactgttat ccagactgta aaagaagttt taaagcagcc accagccata  
2400  
gccaaggaca agaaacatct ttctttggaa gtctgcatgc ttcagttttt ctatgcttat  
2460  
attcaaagaa ttccagtgcc caatttagtg gatagctggg cgtcactggt gatacttctg  
2520  
aaagactcta tacaactgag tcttccagct ccagggcagt ttcttatact tgggggttctg  
2580  
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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
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Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
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Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
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Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
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Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
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Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
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Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
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His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
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His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
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Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
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Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Asp	Lys	Lys	Lys
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Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

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          275          280          285
Asp Ser Ser Arg Thr Leu Tyr Ala Phe Ser Ala Ile Lys Ala Ile Leu
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Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val
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Asn Asn Ala Tyr Thr Pro Gln Leu Ser Leu Leu Gln Asn Leu Leu Ala
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Arg His Arg Ile Ser Val Met Gly Lys Asp Phe Tyr Ser His Ile Pro
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Val Asp Ser Asn His Asn Phe Arg Ser Ser Met Tyr Ile Glu Ile Leu
          355          360          365
Ile Ser Leu Cys Leu Tyr Tyr Met Arg Ser His Tyr Pro Thr His Val
          370          375          380
Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met
385          390          395          400
Ser Ile Glu Ile Leu Thr Leu Leu Phe Thr Glu Leu Ala Lys Val Ile
          405          410          415
Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser
          420          425          430
Lys Cys Lys Val Gln Lys Val Ile Leu His Cys Leu Leu Ser Ser Ile
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Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu
          450          455          460
Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser
465          470          475          480
Glu Asp Glu Phe Asp Asn Gly Ser Thr Leu Gln Ser Gln Leu Leu Lys
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Ile Ser Pro His Gln Pro Met Thr Ser Leu Gln Tyr Leu His Ala Gln
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Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu
545          550          555          560
His Gln His Cys Ala Cys Lys Met His Pro Gln Trp Ile Gly Leu Ile
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Thr Ser Thr Leu Pro Tyr Met Gly Lys Val Leu Gln Arg Val Val Val
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Ser Val Thr Leu Gln Leu Cys Arg Asn Leu Asp Asn Leu Ile Gln Gln
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Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala
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Ser Ile Ile Pro Pro Asp Met Ile Leu Thr Leu Leu Glu Gly Ile Thr
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Leu Leu Val Ser Val Asp Gln Lys His Leu Phe Glu Ala Arg Ser Gly

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Ile	Leu	Ser	Ile	Leu	His	Met	Ile	Met	Ser	Ser	Val	Thr	Leu	Leu	Trp						
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Ser	Ala	Ser	Leu	Thr	Thr	Ile	Asn	Leu	Gly	Ala	Thr	Lys	Asn	Leu	Arg						
705						710					715				720						
Gln	Gln	Ile	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Ser	Met	Asn	His	Gly	Val						
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Lys	Thr	Thr	Thr	Arg	Thr	Lys	Val	Ile	Pro	Ala	Ala	Ser	Glu	Glu	Gln						
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Thr	Val	Ile	Gln	Thr	Val	Lys	Glu	Val	Leu	Lys	Gln	Pro	Pro	Ala	Ile						
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Phe	Tyr	Ala	Tyr	Ile	Gln	Arg	Ile	Pro	Val	Pro	Asn	Leu	Val	Asp	Ser						
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Asp	Val	Thr	His	Lys	Ile	Val	Asp	Ala	Ile	Gly	Ala	Ile	Ala	Gly	Ser						
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Ser	Leu	Glu	Gln	Thr	Thr	Trp	Leu	Arg	Arg	Asn	Leu	Glu	Val	Lys	Pro						
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 Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe  
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&lt;210&gt; 1831

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1831

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<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

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			20					25					30		
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
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Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
		50				55					60				
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg
65					70					75				80	
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85					90						95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
			100					105					110		
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
		115					120					125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
		130				135					140				
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
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<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

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 gcataccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca  
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<210> 1834  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

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 Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln  
 35 40 45  
 His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala  
 50 55 60  
 Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg  
 65 70 75 80  
 Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln  
 85 90 95  
 Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala  
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<210> 1835  
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 <212> DNA  
 <213> Homo sapiens

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 420  
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 480  
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca  
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gatcgccaac cccagcccca ttagtcgcag tctgtcatc aatgcaagca cccgggtgtc  
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<210> 1836  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

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 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro  
 50 55 60  
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro  
 65 70 75 80  
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro  
 85 90 95  
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys  
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 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly  
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 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu  
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<210> 1837  
 <211> 564  
 <212> DNA  
 <213> Homo sapiens

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 240  
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<210> 1838  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

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 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr  
 35 40 45  
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp  
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 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro  
 65 70 75 80  
 Thr Pro Ile Gln

<210> 1839  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 1839  
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 gccgttccctg gcaataaatt ccgcgacgac catgctgcag cgatgaatgt tctcgctcc  
 180  
 cgccttgagg actgggggct tatgccgggc agcgcgaagg tcgctctttc ggacgagggc  
 240  
 gggcaacacc gtcgttgat gccgcacggc accagccacc atctagggtt ggatgtgcac  
 300

<210> 1840  
 <211> 100  
 <212> PRT  
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<400> 1840  
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn  
 1 5 10 15  
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp  
 20 25 30  
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg  
 35 40 45  
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

50                                      55                                      60  
 Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly  
 65                                      70                                      75                                      80  
 Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly  
                                     85                                      90                                      95  
 Leu Asp Val His  
                                     100

<210> 1841  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1841  
 nnctccaaga acgtcccga gtggggcccc agggcgctcg aactccccgg cgggccccgt  
 60  
 gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg  
 120  
 cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg  
 180  
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccggtcgg cagccgcgcg  
 240  
 cagcaactcg cgatgatcgc ggggggtcgag gcgaacggca tccgtccgat cctcgaccag  
 300  
 catttccgc tcgaaaatct ccccgacgcg  
 330

<210> 1842  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1842  
 Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro  
 1                                      5                                      10                                      15  
 Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr  
                                     20                                      25                                      30  
 Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu  
                                     35                                      40                                      45  
 Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu  
                                     50                                      55                                      60  
 Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala  
 65                                      70                                      75                                      80  
 Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro  
                                     85                                      90                                      95  
 Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala  
                                     100                                      105                                      110

<210> 1843  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca  
 60  
 acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat  
 120  
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag  
 180  
 tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc  
 240  
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa  
 300  
 acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggaggtcttc  
 360  
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc  
 420  
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc  
 473

&lt;210&gt; 1844

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1			5						10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
			20					25					30		
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
		35					40					45			
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
		50				55					60				
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
		65			70					75				80	
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85					90					95		
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
		100					105						110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
		115					120					125			
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
		130					135					140			

&lt;210&gt; 1845

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1845

aagcttacga cgcttagctt tggagacctg aaccacttga tcagtgcac aatgagtgga  
 60  
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg  
 120  
 aacctgatcc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg  
 180

cgtggctccc agcagtaccg tgctctcact gtccctgagc tgaccagca gatgtgggac  
 240  
 tccaagaaca tgatgtgtgc tgctgacccg cgtcatggcc gctacctcac agtatctgcc  
 300  
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac  
 360  
 aagaactctt cctacttcgt ggagtggatc  
 390

<210> 1846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1846

Lys	Leu	Thr	Thr	Pro	Ser	Phe	Gly	Asp	Leu	Asn	His	Leu	Ile	Ser	Ala
1				5					10					15	
Thr	Met	Ser	Gly	Val	Thr	Cys	Cys	Leu	Arg	Phe	Pro	Gly	Gln	Leu	Asn
			20					25					30		
Ser	Asp	Leu	Arg	Lys	Leu	Ala	Val	Asn	Leu	Ile	Pro	Phe	Pro	Arg	Leu
			35				40					45			
His	Phe	Phe	Met	Val	Gly	Phe	Ala	Pro	Leu	Thr	Ser	Arg	Gly	Ser	Gln
	50					55				60					
Gln	Tyr	Arg	Ala	Leu	Thr	Val	Pro	Glu	Leu	Thr	Gln	Gln	Met	Trp	Asp
65					70				75					80	
Ser	Lys	Asn	Met	Met	Cys	Ala	Ala	Asp	Pro	Arg	His	Gly	Arg	Tyr	Leu
			85					90					95		
Thr	Val	Ser	Ala	Met	Phe	Arg	Gly	Lys	Met	Ser	Thr	Lys	Glu	Val	Asp
			100					105					110		
Glu	Gln	Met	Leu	Asn	Val	Gln	Asn	Lys	Asn	Ser	Ser	Tyr	Phe	Val	Glu
		115					120						125		
Trp	Ile														
	130														

<210> 1847

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1847

cagccgtgct ttctgcgtc aactcgggaa cggctatatc gcgcagatcc aacagttcca  
 60  
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtaa gctggcgacc  
 120  
 ctggccgccc ccgcgttggc cgatcacgcc atgttgagc aggccttcca gctgttcag  
 180  
 caaaaaagtt gcggacaatc tcctgccgga tggctcgggtg ttcgacttca gggagcgca  
 240  
 tgcactgcac tacgtcgtct atgacctgga gccgctggtt caggcggccc tggcgggcaa  
 300  
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn  
 343

<210> 1848

<211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1848  
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg  
 1 5 10 15  
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val  
 20 25 30  
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser  
 35 40 45  
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr  
 50 55 60  
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala  
 65 70 75 80  
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr  
 85 90

<210> 1849  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 1849  
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt  
 60  
 gacattgaac atggagaccc aaaagagaat gtactaggtt cagcttttga catgaaacag  
 120  
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca  
 180  
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca  
 240  
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc  
 300  
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct  
 360  
 gacaaggaaa ggaaanatga ttacaatcaa  
 390

<210> 1850  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1850  
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu  
 1 5 10 15  
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu  
 20 25 30  
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr  
 35 40 45  
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln  
 50 55 60  
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

```

65          70          75          80
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
          85          90          95
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
          100          105          110
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
          115          120          125
Asn Gln
          130

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<210> 1851  
 <211> 574  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1851
ncgatcggag aggcctttccg cactggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttcctgct gctcttcatg aagctcaggt ggttcctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acgggggaca gctggaccca gaacacgccc aatg
574

```

<210> 1852  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1852
Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
1          5          10          15
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
          20          25          30
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
          35          40          45
Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg Gln Leu Arg
          50          55          60
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
65          70          75          80
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

```

[illegible]



<210> 1855  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 1855  
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac  
 60  
 ccgagcgaaa cgcaggaaat cgtggcgac gtcctggacc tggacaacca cgaggtcacg  
 120  
 gtgcagtgtc tgcgcattgg cgtgggcttt ggcggtaagg aaatgcagcc gcacgggttc  
 180  
 gccgcgatcg cagcactcgg cgcgaccctg accgggacgac cggttcgact gcgactgacc  
 240  
 cgaaaccagg acatcaccat ctccggaaag cgccacccat acctcgcgga gtgggacgtg  
 300  
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg  
 360  
 tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc  
 420  
 tattggatc  
 429

<210> 1856  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1856  
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys  
 1 5 10 15  
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu  
 20 25 30  
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly  
 35 40 45  
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala  
 50 55 60  
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr  
 65 70 75 80  
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala  
 85 90 95  
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg  
 100 105 110  
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro  
 115 120 125  
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile  
 130 135 140

<210> 1857  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgcctac cgatcaacag acgcagccgc cgtgcgttga  
 60  
 gataccagcc gagcacgac atgctcagca tggtcagcag cagccagaac ggaaatcgca  
 120  
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca  
 180  
 gtgcgcggag gagcagccac catcgcccg ccatgctgcg gcactcgata ccaatacgtt  
 240  
 gcgcttcaac caatcgatct tggtcgaggc atgccgcca tcttccaaca ggcgagtcac  
 300  
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag  
 360  
 acgcagcacg ggtgcctgtc ggtggcgggc gag  
 393

&lt;210&gt; 1858

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1			5					10				15			
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
			20					25				30			
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
		35					40				45				
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
		50				55				60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65					70				75					80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90						95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
			100												

&lt;210&gt; 1859

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1859

nagatctggc gcctcgtcac caacttcctc tacttccgca agatggattt ggattttctg  
 60  
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga  
 120  
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattgtt  
 180  
 ctgatcgagg ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc  
 240  
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatag  
 300  
 agcaatctgg gcctgttcac ctttacggct gcatacttac catgg  
 345

<210> 1860  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1860  
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp  
   1                  5                  10                  15  
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu  
           20                  25                  30  
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met  
           35                  40                  45  
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly  
           50                  55                  60  
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser  
   65                  70                  75                  80  
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro  
                   85                  90                  95  
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr  
           100                  105                  110  
 Leu Pro Trp  
           115

<210> 1861  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 1861  
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggCGT tagaaaagcc  
   60  
 aatagtgagc ttcattcagt cggccttaggt gttatgaact tacatggcta tcttgctaaa  
   120  
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg  
   180  
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt  
   240  
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa  
   300  
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg  
   360  
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggtttatt ccatgcttat  
   420  
 cgtttagcga ttgca  
   435

<210> 1862  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 1862  
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

1 5 10 15  
 Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met  
 20 25 30  
 Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu  
 35 40 45  
 Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr  
 50 55 60  
 Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe  
 65 70 75 80  
 Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe  
 85 90 95  
 Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu  
 100 105 110  
 Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln  
 115 120 125  
 Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile  
 130 135 140  
 Ala  
 145

&lt;210&gt; 1863

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1863

nggatacctca cgcccgccat catacgtggg atatacgttga gcaaatacgt catgacgggg  
 60  
 tctccgtcgt gctcactacc cacaacatgg atgagggtca acggctggct gatcacgtct  
 120  
 ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt  
 180  
 cgagtttgga agatgtgttc ctcaactcaca ctagtgaccg cgcagcaggg aggaattgac  
 240  
 atgacgacac tcgatctccg cccgcacct caggccgcac cggctgctgc acgctgctgct  
 300  
 aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct  
 360  
 ctcgtcattc ccatcgggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg  
 420  
 acgatggacg tcttagcacc ctcaagtctg gcgctcgcca tctggctgac atgtttcact  
 480  
 tccaagcga tcatgaccg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca  
 540  
 accccggttag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt  
 600  
 ctcgctcagg tgatactgct tgtcatcacc tctttagcgc tgggctggca ccccccagg  
 660  
 tccggcctgg cctggctccc aaccctggtg agcgttgtgc tcgccatgat gacattcggg  
 720  
 ctgcagcac tggcaatggc cggcgtggc aaagctgaag tcactctcgg actggccaac  
 780  
 ttggtataca tc  
 792

<210> 1864  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<400> 1864  
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys  
 1 5 10 15  
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg  
 20 25 30  
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser  
 35 40 45  
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys  
 50 55 60  
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp  
 65 70 75 80  
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala  
 85 90 95  
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg  
 100 105 110  
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile  
 115 120 125  
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val  
 130 135 140  
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr  
 145 150 155 160  
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu  
 165 170 175  
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys  
 180 185 190  
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val  
 195 200 205  
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala  
 210 215 220  
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly  
 225 230 235 240  
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu  
 245 250 255  
 Gly Leu Ala Asn Leu Val Tyr Ile  
 260

<210> 1865  
 <211> 717  
 <212> DNA  
 <213> Homo sapiens

<400> 1865  
 ngccggtga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc  
 60  
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg  
 120  
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc  
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag  
 240  
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag  
 300  
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccgggctg  
 360  
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc  
 420  
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct  
 480  
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt  
 540  
 caagcacagc ttttgcagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc  
 600  
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca  
 660  
 taccaacgtt taaaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga  
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
50					55					60					
Pro	Ile	Ser	Lys	Glu	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys	
65				70				75					80		
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
		100						105				110			
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
		115					120				125				
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
130					135					140					
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145				150						155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165					170					175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
		180					185					190			
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195						200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
210					215						220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

&lt;210&gt; 1867

&lt;211&gt; 518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1867

nnggggcacg gttagggcca gtgggcagag gggtagggga tatgcaggac cttccactgt  
 60  
 tccatgcatg ggacggcact tgggtccgag atcaggtagc caggcatgga aggaacatgg  
 120  
 gaggaaggga actgtctgtt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca  
 180  
 tctggttggc tggccctgtt acccaacaac gtggtaggca aggccttgtg cccggagagg  
 240  
 ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca  
 300  
 cctctctgc ctccaccct tccaccnng cagccccgc ctctccgca gaactctccc  
 360  
 caagccagac cgctggacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa  
 420  
 gcgaggtgct ttgcacccc aagtgatcat gttcccgtag ccagcctgcc aaggtgatgt  
 480  
 ggagcttggg gagcgggggc tggcagggtt tttccgga  
 518

&lt;210&gt; 1868

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1868

Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val  
 1 5 10 15  
 Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu  
 20 25 30  
 His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro  
 35 40 45  
 Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro  
 50 55 60  
 Gln Ala Arg Pro Pro Gly Pro Ala Ala  
 65 70

&lt;210&gt; 1869

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1869

acgcgtcacc ttctgtctgg agctactggg agccctcgga cacctgctg cattgcccga  
 60  
 ccgtgacatg ccgagcaccg aaaccacact gtggattcgc gagctgagcc gcatcgaccg  
 120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac  
 180  
 gaccgacgat ggcaccgagc ctgagggttg tgccctgcca gcggtctact gccgtcgttg  
 240  
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa  
 300  
 cgacagcatc cgacggaccc acgcggcaca cgacggctgc ttccgagcct tgctttcggc  
 360  
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgctggtt  
 420  
 cgacaccgtc aacagg  
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10					15	
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40				45				
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55				60					
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
65					70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
				85					90					95	
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
		100						105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggctg atgtctccaa cgtctttgcc agccttgaca tggctagcga  
 60  
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg  
 120  
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgcccgaat gtccaccgaa  
 180  
 tcaggtattc cggactttcg ctcggctggc gggctttaca ccactcagca tgacctgcc  
 240  
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc  
 300  
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg  
 360



ttggttgccct tggagcaggc tggggaactt tcgacgatca ttaccagaa tattgacggc  
 420  
 ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggc gcac  
 474

<210> 1872  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1872  
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr  
 1 5 10 15  
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp  
 20 25 30  
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe  
 35 40 45  
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala  
 50 55 60  
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg  
 65 70 75 80  
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu  
 85 90 95  
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala  
 100 105 110  
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His  
 115 120 125

<210> 1873  
 <211> 338  
 <212> DNA  
 <213> Homo sapiens

<400> 1873  
 nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg  
 60  
 gggttcctcg gggatctcgg aggggagacc cccaccggg aggactggag gcagcgcctc  
 120  
 tccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgggc  
 180  
 ccgcaggggg cgcgctcaag gcaagggtccg cggcgagaac ggtgcccagt gggagcgaag  
 240  
 ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctcaa attttagtat  
 300  
 gcatatgagt caccaggaaa gttttttgaa acaaattt  
 338

<210> 1874  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1874  
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

&lt;210&gt; 1875

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1875

```

aagcttggcg tacaagtggg tcgtcgtttc tcaggtgggt gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttccg tgattttgga
120
aaattcacag aaccctgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

&lt;210&gt; 1876

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1876

```

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```

115

120

&lt;210&gt; 1877

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1877

acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac tacccattaa  
 60  
 cgaggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt  
 120  
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt  
 180  
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc  
 240  
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg  
 300  
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg  
 357

&lt;210&gt; 1878

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1878

Met	Gln	Ile	Ala	Glu	Ile	Ser	Leu	Ser	Asp	Cys	Gly	Tyr	Ile	Ile	Ser
1				5					10					15	
Ser	Phe	Gln	Ala	Ala	Gly	Pro	Arg	Ala	Val	Gly	Leu	Gln	Arg	Pro	Ile
		20					25				30				
Ile	Ser	Glu	His	Phe	Phe	Gln	Phe	Asp	Pro	Phe	Asp	Lys	Arg	His	Trp
		35				40					45				
Val	Val	Ser	His	His	Leu	Pro	His	Ala	Ala	Thr	Ala	Ala	Phe	Thr	Ser
	50				55					60					
Gly	Phe	Glu	Asp	Cys	Ala	Gly	Leu	Val	Ser	Asp	Thr	Ala	Gly	Ser	Asn
65				70					75					80	
Thr	Leu	Asp	Gly	Lys	Asp	Tyr	Val	Glu	Ser	Cys	Cys	Asn	Ala	Ile	Pro
			85					90						95	

&lt;210&gt; 1879

&lt;211&gt; 1062

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1879

nacgcgtgga tgctccttgg acggcttttt cgtggtagag ggttcccggg gcgcgcgcga  
 60  
 tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctctccct  
 120  
 gtccctccca caggctctga cgcctctct gcggcttcgg tgtttgaaca ggccacagtc  
 180  
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg  
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga  
 300  
 tgcaccatgc caatagtga taagttgaag gaggcctga aaccggccg caaggactcg  
 360  
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag  
 420  
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc  
 480  
 aaatatgtgt tgctcaaccc caaacagag ggagctagtc gccacaagag tggagatgac  
 540  
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca  
 600  
 gccccgcaga aagtgtttt cccacggag cgactgtctc tgagggtggga gcgggtcttc  
 660  
 cgcgtgggcg caggactcca caaccttggc aacacctgct ttctcaatgc caccatccag  
 720  
 tgcttgacct acacaccacc tctagccaac tacctgtctt ccaaggagca tgctcgagc  
 780  
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc  
 840  
 gccaacagcg gcaacgccat caagccgctc tccttcatcc gagacctgaa aaagatcgcc  
 900  
 cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggta caccatcgac  
 960  
 gccatgcaga aagcctgcct gaatggctgt gccaaagttgg atcgtcaaac gcaggctact  
 1020  
 accttggctc atcaaatttt tggagggtat ctcagatcac gc  
 1062

&lt;210&gt; 1880

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10						15	
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35				40						45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50				55						60				
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65					70					75				80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90					95		
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100					105						110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
		115					120					125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130					135					140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

```

145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
          245          250

```

<210> 1881  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

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<400> 1881
natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
60
aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagtctgta gccatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
358

```

<210> 1882  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1882
Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
1          5          10          15
Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
          20          25          30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
          35          40          45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
          50          55          60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65          70          75          80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
          85          90          95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
          100          105          110
Ile Arg Arg

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.115

<210> 1883  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 1883  
 ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggtc gtcagactt  
 60  
 gggctgggag aatgatacta agacaccaga catcacatcc attgctccca tccccactat  
 120  
 tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tgggtgectcc  
 180  
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat  
 240  
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg  
 300  
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg  
 360  
 cgatttn  
 367

<210> 1884  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1884  
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp  
 1 5 10 15  
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala  
 20 25 30  
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser  
 35 40 45  
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val  
 50 55 60  
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu  
 65 70 75 80  
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp  
 85 90 95  
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp  
 100 105 110  
 Met Pro Ile Ala Gly Asp Xaa  
 115

<210> 1885  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1885  
 nacgcgtatt cgcaaagaat gtctttgctg cacagagaca gtcgtcgtcc tcgacaccat  
 60

gttcgacgat ctccgcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg  
 120  
 ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccggggt ccaaccactg  
 180  
 aactggtgga tctcgtcat tcccggcttc gctgcgctca tctgctggt gcgcaacgcc  
 240  
 actggtcggg ccgcggcagg actgggggtat ctcttcggca tcggtctgtt taccaccacc  
 300  
 atttcctggg taggcgtcat cggcccgccg gtggcgatac ttctcatcgc tgtcatggcg  
 360  
 ttgtggtgtc tgctggccgg gtggacgatt cg  
 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

Xaa	Ala	Tyr	Ser	Gln	Arg	Met	Ser	Leu	Arg	His	Arg	Asp	Ser	Arg	Arg
1				5				10						15	
Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
			20					25					30		
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
			35				40					45			
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50				55					60					
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65					70					75				80	
Thr	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu
				85					90					95	
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100					105					110		
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
		115					120						125		
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

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 120  
 gctgccaaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt  
 180  
 ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt  
 240  
 ggtctgcccc aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc  
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 cgt  
 363

<210> 1888  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1888  
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly  
 1 5 10 15  
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val  
 20 25 30  
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His  
 35 40 45  
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro  
 50 55 60  
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu  
 65 70 75 80  
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly  
 85 90 95  
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val  
 100 105 110  
 Leu Arg Thr Ala Asp Ala Ile Thr Arg  
 115 120

<210> 1889  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

<400> 1889  
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 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacgggtt ttcgaccctc  
 120  
 acagcgtctc tcggtgatcg tatcgacatg gggctgggccc gggctcccgg cggtgacatg  
 180  
 ctctccgccc atgccctcaa tcaggggacg gtcattccgc ctgaggccat taattccctc  
 240  
 atcgccgaaa cggtaggggt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag  
 300  
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc  
 360  
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgcccga gtttttcacc  
 420  
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc  
 480  
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga  
 530

<210> 1890



<211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 1890  
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile  
   1                  5                  10                  15  
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln  
                   20                  25                  30  
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile  
           35                  40                  45  
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His  
   50                  55                  60  
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu  
 65                  70                  75                  80  
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His  
                   85                  90                  95  
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln  
           100                  105                  110  
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu  
           115                  120                  125  
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp  
           130                  135                  140  
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro  
 145                  150                  155                  160  
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro  
                   165                  170                  175

<210> 1891  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 1891  
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 120  
 cgtcaattta cagaggcagc ccagcttctt atcaactttc tggcctggct taacggtgta  
 180  
 atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccggcctc ctccactctg  
 240  
 ggattttgta ccggtatggg gaggcactac ggttgcagat ttagcttttc agcgtggata  
 300  
 caagcaccca agtgtccag accacagcag aaaccgtggt gctgccgttt ccaacctgct  
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 tgc  
 423

<210> 1892  
 <211> 121  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
 20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
 35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
 50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
 65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
 85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
100           105           110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
115           120

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&lt;210&gt; 1893

&lt;211&gt; 886

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1893

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60
catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcgtt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tgggtgggtat agcgagtatg tcatgattac cggtcacgc
300
tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag
360
gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
acccaagctg acgtcggtaa ggctggcag gccatgctgg cacgagtgcg cgactggcac
480
gatttagacc ccgcgtttta cacggagatg gagaaactta tcgatttcgt cacgcgtgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatccg ggatgtgagt gccagggtta tcgatccccg gttccggacc ctccacgate
660
atcaaatcca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgcgtggggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca  
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

Thr	Gly	Gly	Ala	Glu	Pro	Ala	Arg	Val	Ala	Leu	Pro	Ser	Arg	Ile	Tyr
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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp
			35					40					45		
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
			50					55				60			
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75				80	
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
				85					90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
			115					120				125			
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
			130					135				140			
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145					150					155				160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
				165					170					175	
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
			180					185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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cttccccctgt tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac  
180  
acaactttag aaagttgctt gcagaacaaa aaggctacac aaaagcccac tggctctcaa  
240  
taccctcaag tggatggcag aggctcttgt tgaaagtggg caatttgcaa tctttgcatt  
300  
aggatttcag atgcatgccca ggtttccact gattgccaga actcgagatc actacacatg  
360  
gatcccaaaa atcaacatgg cagtggcagt tcgtagttg tgatccagca gccttctttg  
420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta  
480  
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtgggtgaaa  
540  
agacctgctc ctgggacagc accaagacaa gaaaagcatg aaaggactca tgaaatcata  
600  
ccaattaatg tgaataataa ctacgagcac agacacacaa gccacctggg acatgcagta  
660  
ctcccaagta atgccagggg ccccatTTTTg agcagatcaa ccagcactgg aagtgcagcc  
720  
agctctggga gcaacagcag tgcctcttct gaacagggac tgtaggaag gtcaccacca  
780  
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840  
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900  
gaacagtgtg ggaagtgcaa gtgtggagaa tgcactgctc ccaggacctt accatcctgt  
960  
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1020  
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1080  
tcagataatc cttgctcctg ttcacaatca cactgctgct ctagatacct gtgtatggga  
1140  
gccatgtctt tatttttacc ttgcttactc tggtatcctc ctgctaaagg atgcctgaag  
1200  
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1260  
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1380  
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1440  
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1560  
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1740  
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1800  
gggatatatt ttttgcata acgtaaaaat tttcctttaa ccactgccct ctcttttctc  
1860  
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1920  
tttttcttct tatgtaattt tagattcgcc ttacaatgta aatcttcaca ttggagataa  
1980  
tattggttgg accttgccca tcttcactct agccttcgta tttgtgaagg actcagccac  
2040

ctctcttctt caccatgc ttctcacaa atttttgttg tcattgaggg cacttggata  
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 actcaagttg atatttatag ctgatcaatc tatatgtgtc acagaactat gctgcctaaa  
 2160  
 gtgatcttgg ctcttaatg gtccttttgg ccccttggat agttaacagc tgagtaattc  
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 2280  
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 2340  
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 2400  
 ctgttgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataagg  
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 2520  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa  
 2555

<210> 1896  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1896  
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg  
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 Thr Leu Pro Ser Cys Leu Ala Cys Asn Arg Gln Cys Leu Cys Ser Ala  
 20 25 30  
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile  
 35 40 45  
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn  
 50 55 60  
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met  
 65 70 75 80  
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala  
 85 90 95  
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg  
 100 105 110  
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu  
 115 120 125  
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser  
 130 135

<210> 1897  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens

<400> 1897  
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 gtctacagtc acactggcga gaagcccttc cactgcactg actgcggcaa gggcttcggc  
 120

cacgcttcct ccctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt  
 180  
 ctggagtgtg gccgggcctt cacgcagcgc tcggcgctga cttcgcacct gcgcgtccac  
 240  
 accggcgaga aaccctatgg ctgcgccgac tgtggccgcc gcttcagcca gagctctgcc  
 300  
 ctctaccagc accggcgcggt gcacagcggc gagacccctt tcccctgccc ggactgtggc  
 360  
 cgcgccttcg cctacccttc ggacctgcgg cgccacgtgc gcatccacac gggcgagaag  
 420  
 ccctaccctt gccagactg tgggcgcgcg ttttcctcct cctccctgct ggtcagtcac  
 480  
 cggcgggcac actccggcga gtgcccctat gtttgtgacc agtgtggcaa acgtttctcc  
 540  
 cagcgcaaga acctctccca gcaccaggtc atccatacag gggagaagcc ctatcactgc  
 600  
 cctgactgtg gtcgctgctt ccggaggagc cggtccttgg ccaatcacgc gaccacacac  
 660  
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 aagcgttttg ctcaagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag  
 840  
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca  
 900  
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 938

<210> 1898

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
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Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
			20					25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
	50					55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70					75					80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
	130					135					140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

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145          150          155          160
Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
          165          170          175
Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
          180          185          190
Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
          195          200          205
Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
          210          215          220
Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
225          230          235          240
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
          245          250          255
Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
          260          265          270
Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
          275          280          285
Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
          290          295          300
Arg Pro Gln Thr Val Ala Leu Asp
305          310

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&lt;210&gt; 1899

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1899

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acacgctgga gcttcctgca gggccaggac tcagccatct tcgacctcgg gcattcttat
120
gaggaaatat caggccggct gcggaggga ctgggcaaaa gggacaggaa cggggggcag
180
ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgcac agacatggag ttcaccttg ttcagctgaa gaaggacctg
300
gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
360
gtggagtga tgaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcacgtg
480
gaggaggtga aggccagta tgacgccg
508

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&lt;210&gt; 1900

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1900

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Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

```

```

      1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
65           70           75

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&lt;210&gt; 1901

&lt;211&gt; 453

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1901

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60
cgggtgttcgg cgatgcgaag gcaaccgcgc cttccaagtt cgacccgttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcatccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtccctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggg gga
453

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&lt;210&gt; 1902

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1902

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Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
      1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
100           105           110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

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115 120 125  
 Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys  
 130 135 140  
 Glu Ile Leu Ile Glu Gly Gly  
 145 150

<210> 1903  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1903  
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 60  
 gacttgtcta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga  
 120  
 atttgtgcca acccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg  
 180  
 ctgctggggg attgctgggt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc  
 240  
 ctggaccagg tcattcctgc gggacagccg agctggggccg accaggagta ccggggctcc  
 300  
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc  
 360  
 ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa  
 420  
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg  
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 531

<210> 1904  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1904  
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser  
 1 5 10 15  
 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp  
 20 25 30  
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe  
 35 40 45  
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp  
 50 55 60  
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu  
 65 70 75 80  
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu  
 85 90 95  
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val  
 100 105 110  
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg  
 115 120 125  
 Met Pro Trp Trp Thr

130

<210> 1905  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 1905  
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 ctcctggccg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcggtgctg  
 180  
 ttgttcgccc aggtgctgca cgcggcgacc ttgcccagct ttcacgctc tgccattcat  
 240  
 ttcgtgcaac gtagcttcgg cgcgcgcnc acaaggccag ggcaggcggt atacgctgca  
 300  
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 387

<210> 1906  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1906  
 Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu  
 1 5 10 15  
 Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val  
 20 25 30  
 Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu  
 35 40 45  
 Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln  
 50 55 60  
 Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His  
 65 70 75 80  
 Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala  
 85 90 95  
 Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr  
 100 105 110  
 Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile  
 115 120 125  
 Val

<210> 1907  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1907

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120  
ggcggcgaca cgctgaaggc cacgttcttg acgggcctgc gcccgatgac gccggacggc  
180  
acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg  
240  
ctcggctgga caatggtgtg cggctcgggc caactgctcg ccgacctgat ctcgggcaag  
300  
atgcccgcga tccaggccga cgacctgtct nnc  
333

&lt;210&gt; 1908

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
1				5					10					15	
Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40				45				
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55					60				
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65				70					75					80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85				90							95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105						110	

&lt;210&gt; 1909

&lt;211&gt; 2767

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1909

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60  
gaaggctggct gcggcgacaa aatgaagata ttcgtgggca acgtcgacgg gccggatacg  
120  
actccggagg agctggcagc cctctttgctg ccctacggca cggatcatgag ctgcgcgctc  
180  
atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa  
240  
gccctgcacg gccacgagct gcggccgggg gcgcgctcgc tgggtggaaat gtcgcgcccc  
300  
aggcctctta atacttgaa gattttcgtg ggcaatgtgt cggctgcatg cacgagccag  
360  
gaactgcgca gcctcttcga gcgccgcgga cgcgtcatcg agtgtgacgt ggtgaaagac  
420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac  
480  
ggcaaagaag tgaagggcaa ggcgatcaac gtggaactct ccaccaaggg tcagaagaag  
540  
gggcctggcc tggctgtcca gtctggggac aagaccaaga aaccaggggc tggggatacg  
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720  
cgcagccctc tgcgccgttc acctccccga gcctcttatg tggctcctct gacggcccag  
780  
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840  
tctgcctctt tgggtgttgg ctatcggact cagcccatga cagcccaggc agcctcttac  
900  
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960  
tcccagtctg ctgcagcttc tcaactcggc ccataatggtg gagcccagcc ctacgcctcg  
1020  
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1080  
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1140  
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1200  
ttaggtctct acggggctca ggcagcctcc tatggggccc agtctgcagc ctctcacta  
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1320  
tctgccccat atgtctgaca gcaggctgct tcctactctt cccaacctgc tgcctatgtg  
1380  
gcacagccag ccacagctgc tgcctatgcc agccagccag cagcctacgc cgcacaagcc  
1440  
actaccccaa tggttggtc ctatggggcc cagccgggtg tgcagacca gctgaatagt  
1500  
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1560  
gccactggct cctatggtgc cgcagcagcc tacggggccc aaccttctgc cactctggca  
1620  
gctccttacc gcaactcagtc atcagcctca ttggctgctt cctatgctgc ccagcagcat  
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1740  
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1800  
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1860  
aaggctgtcg ccatgtcgaa aaggatggg tccgaccggc gtttagccga gctctctgat  
1920  
taccgcggtt tatcagagtc gcagctttcg ttccgcgct cgcgacaaa gtcctcgtg  
1980  
gattaccgtc gcctgcccga tgccattcc gattacgcac gctattcggg ctctataat  
2040

gattacctgc gggcggtca gatgcactct ggctaccagc gccgcatgta gggccatcct  
 2100  
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 2160  
 tataactact ctggcccata cctttcctgg ttgtggtttt tcatgccctc taccatgtgg  
 2220  
 gccttccccca ggagatgatc ctgttaagtg ttcggcagta acctactttg ttccttcgcc  
 2280  
 tcagcagcaa atcttgctac tggtctaga tctgcgggtt cccctctacc ctgcctcctg  
 2340  
 tctccccaga atgggaattt cttttatgtt tttatttttt tcttggtccc cttttatttt  
 2400  
 tgtgcgcat atttaaggtc gtctggatgg ggaagcaacc tgcagctgag gtcgccggcg  
 2460  
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 2520  
 gccaaagtgt gccagcagtc cagggtaccc tgactgtccc tctgtagact gttgagactg  
 2580  
 agttcctgtt gggacagtca gttggtatgt atccaagtcc ctgctgacca ctaatgttct  
 2640  
 agctgatggg gagcggcaca gtcccacttc cccatctccc caagtaggtg gtgtagaaa  
 2700  
 accttaattt tttttccctt ttgtatggac tacaaataaa acttggggca atttgcagtt  
 2760  
 tggaaaa  
 2767

&lt;210&gt; 1910

&lt;211&gt; 669

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
1				5					10					15	
Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
		20						25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
	35						40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55				60					
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65				70					75					80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85					90					95		
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
			100				105					110			
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
	115					120				125					
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130				135					140					
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145				150					155					160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

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165      170      175
Gly Thr Gly Gly Phe Ser Ala Thr Phe Asp Tyr Gln Gln Ala Phe Gly
180      185      190
Asn Ser Thr Gly Gly Phe Asp Gly Gln Ala Arg Gln Pro Thr Pro Pro
195      200      205
Phe Phe Gly Arg Asp Arg Ser Pro Leu Arg Arg Ser Pro Pro Arg Ala
210      215      220
Ser Tyr Val Ala Pro Leu Thr Ala Gln Pro Ala Thr Tyr Arg Ala Gln
225      230      235      240
Pro Ser Val Ser Leu Gly Ala Ala Tyr Arg Ala Gln Pro Ser Ala Ser
245      250      255
Leu Gly Val Gly Tyr Arg Thr Gln Pro Met Thr Ala Gln Ala Ala Ser
260      265      270
Tyr Arg Ala Gln Pro Ser Val Ser Leu Gly Ala Pro Tyr Arg Gly Gln
275      280      285
Leu Ala Ser Pro Ser Ser Gln Ser Ala Ala Ala Ser Ser Leu Gly Pro
290      295      300
Tyr Gly Gly Ala Gln Pro Ser Ala Ser Ala Leu Ser Ser Tyr Gly Gly
305      310      315      320
Gln Ala Ala Ala Ala Ser Ser Leu Asn Ser Tyr Gly Ala Gln Gly Ser
325      330      335
Ser Leu Ala Ser Tyr Gly Asn Gln Pro Ser Ser Tyr Gly Ala Gln Ala
340      345      350
Ala Ser Ser Tyr Gly Val Arg Ala Ala Ala Ser Ser Tyr Asn Thr Gln
355      360      365
Gly Ala Ala Ser Ser Leu Gly Ser Tyr Gly Ala Gln Ala Ala Ser Tyr
370      375      380
Gly Ala Gln Ser Ala Ala Ser Ser Leu Ala Tyr Gly Ala Gln Ala Ala
385      390      395      400
Ser Tyr Asn Ala Gln Pro Ser Ala Ser Tyr Asn Ala Gln Ser Ala Pro
405      410      415
Tyr Ala Ala Gln Gln Ala Ala Ser Tyr Ser Ser Gln Pro Ala Ala Tyr
420      425      430
Val Ala Gln Pro Ala Thr Ala Ala Ala Tyr Ala Ser Gln Pro Ala Ala
435      440      445
Tyr Ala Ala Gln Ala Thr Thr Pro Met Ala Gly Ser Tyr Gly Ala Gln
450      455      460
Pro Val Val Gln Thr Gln Leu Asn Ser Tyr Gly Ala Gln Ala Ser Met
465      470      475      480
Gly Leu Ser Gly Ser Tyr Gly Ala Gln Ser Ala Ala Ala Ala Thr Gly
485      490      495
Ser Tyr Gly Ala Ala Ala Ala Tyr Gly Ala Gln Pro Ser Ala Thr Leu
500      505      510
Ala Ala Pro Tyr Arg Thr Gln Ser Ser Ala Ser Leu Ala Ala Ser Tyr
515      520      525
Ala Ala Gln Gln His Pro Gln Ala Ala Ala Ser Tyr Arg Gly Gln Pro
530      535      540
Gly Asn Ala Tyr Asp Gly Ala Gly Gln Pro Ser Ala Ala Tyr Leu Ser
545      550      555      560
Met Ser Gln Gly Ala Val Ala Asn Ala Asn Ser Thr Pro Pro Pro Tyr
565      570      575
Glu Arg Thr Arg Leu Ser Pro Pro Arg Ala Ser Tyr Asp Asp Pro Tyr
580      585      590
Lys Lys Ala Val Ala Met Ser Lys Arg Tyr Gly Ser Asp Arg Arg Leu

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595                      600                      605  
 Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe  
 610                      615                      620  
 Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp  
 625                      630                      635                      640  
 Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu  
 645                      650                      655  
 Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met  
 660                      665

<210> 1911  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 1911  
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 60  
 ggtgcgcgga tgcgtttgcg cccctgctg cgttccgacg gtcattgagt gggcgctcag  
 120  
 cgcctcgacg atgaaagctt cctccgcca gttgagccga cccaagccgc accgtgggag  
 180  
 gcagcgcata gccagcagc gttgtggaat cacctgaagt acctgcgcac cgccgcgcgt  
 240  
 gaagcactgg tgggtccgct cgtcattgag gtggagggga aattcgagg gcaggaacc  
 300  
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg  
 339

<210> 1912  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1912  
 Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser  
 1                      5                      10                      15  
 Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser  
 20                      25                      30  
 Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu  
 35                      40                      45  
 Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser  
 50                      55                      60  
 Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg  
 65                      70                      75                      80  
 Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala  
 85                      90                      95  
 Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys  
 100                      105                      110  
 Trp

<210> 1913  
 <211> 767

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1913

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 atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca  
 120  
 gcgcagtagc tcgatctcgt cctcccagcc ttgtccgaaa cctccgcaa tctcatcggc  
 180  
 cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttgc  
 240  
 tcccagctgt cgggcagtag aaggcacctc ggatcaagct ttcctggcgt gaactgggtc  
 300  
 tggtagccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg  
 360  
 cagaattgcg tcgcagccac ccggaccttg ccatcaaggt ggcccgcccc accggaccag  
 420  
 caccggtcct cctcaacctc gtcgatacgc gattgcgtct ggcagctcat cgcgtccatg  
 480  
 cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg  
 540  
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 600  
 ccaccaatcg tggtagggct actgcggtcg aggaggtcgt cggccgctg cgacaggagg  
 660  
 ggcgcgctca tatcgtagt ggaagcctgt ggatttgca cgacgagaat ttccgcattc  
 720  
 atactcgcca ggctttgcat gccggtgccg aggttgctgc cgcaccg  
 767

&lt;210&gt; 1914

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1914

Met	Ser	His	Leu	His	Pro	His	Ile	Glu	Ser	Thr	Val	Ser	Phe	Val	Pro
1				5					10					15	
Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
			20					25					30		
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
		35					40					45			
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
		50				55				60					
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65					70					75				80	
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
			85					90					95		
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
		100					105					110			
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
		115					120					125			
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val



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      130              135              140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala
145              150              155              160
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr
      165              170              175
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro
      180              185              190

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<210> 1915  
 <211> 571  
 <212> DNA  
 <213> Homo sapiens

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<400> 1915
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120
ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
180
tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag
240
gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccacacca gaacacatgg
300
agaagccaca gcacaacctc agcggccgcc atgcaggacc ctgggtctca cccattgcac
360
ccaccgtgcg ggaccctctg gcctcaccgc gaacatccac agtgtggggac tgctgcgtct
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caccactgc acctgccttg caggatccct gactctcacc cgccgcaccc gccgtgcggg
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540
gcgtctcacc caccgcaccc gccgtgcggg a
571

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<210> 1916  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

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<400> 1916
Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
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Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
      20      25      30
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
      35      40      45
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
      50      55      60
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
65      70      75      80
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
      85      90      95
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

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100 105 110  
 Pro Pro His Pro Pro Cys Gly  
 115  
 <210> 1917  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens  
 <400> 1917  
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 60  
 gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt  
 120  
 catccctatg gcccgtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccc  
 180  
 gatttcgccg ccggatgggt gtcgaccgc ttggcagttc ccgtacatcg cacagtggcc  
 240  
 gactcccca ggagacactt cccggtgact catttgagc tcaatcggga gacaaccac  
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 gtagacgtcg atgtcattga cgagcgcacg gtctgtgtat gtgttcggg ttcgccggaa  
 360

<210> 1918  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1918  
 Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr  
 1 5 10 15  
 Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly  
 20 25 30  
 Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser  
 35 40 45  
 Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala  
 50 55 60  
 Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala  
 65 70 75 80  
 Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg  
 85 90 95  
 Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg  
 100 105 110  
 Val Cys Val Pro Gly Ser Pro Glu  
 115 120

<210> 1919  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 1919  
 nncggccgca gctgtgtcca ctgcgtgtc cctgccacct cggccatctg cctctctctt  
 60

ccaggctgca gccatccctc ctgcactgct gaggcctggc caccgcgcatc ncggccacgc  
 120  
 ccacctccat cctctttgcc ccttactaaa cactgggagc cggcccgccc gcgacaggcc  
 180  
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtacccacc  
 240  
 tacgcactta caaagtgcag gccaccgccc agccccact ccagacacag gcggaggcca  
 300  
 agctcgcggg caccgtatca tcccgtgccg tctccaccct acccctgccca attg  
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
		35					40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65				70					75					80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
				85					90					95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
				115											

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact  
 60  
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac  
 120  
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc  
 180  
 aggtgccact ccacagccgt gggcagacct gggagcccag ctcctcctgg tttcacctc  
 240  
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct cccagatgac  
 300  
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcnctg tngtcca  
 357

<210> 1922

<211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 1922  
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly  
 1 5 10 15  
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg  
 20 25 30  
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro  
 35 40 45  
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser  
 50 55 60  
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn  
 65 70 75 80  
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro  
 85 90

<210> 1923  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 1923  
 nattnaatta tgggtgagaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca  
 60  
 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc  
 120  
 cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc  
 180  
 ccgttgccct taaacggacg tatcttaaatt gacttttatt ggaaggcaca ggccaattc  
 240  
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg  
 300  
 cagaaatatg attatttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa  
 360  
 aatcccag  
 368

<210> 1924  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1924  
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu  
 1 5 10 15  
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser  
 20 25 30  
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys  
 35 40 45  
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg  
 50 55 60  
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

65                                      70                                      75                                      80  
 Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu  
    85                                      90                                      95  
 Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg  
    100                                      105                                      110  
 Pro Phe Thr Phe Glu Asn Pro  
    115

<210> 1925  
 <211> 427  
 <212> DNA  
 <213> Homo sapiens

<400> 1925  
 actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaacca gtgtggcaag  
 60  
 cccccctgtg atttgagget aatcctctcc caccctgttc tggcacatgt gcggtgcccc  
 120  
 gggctcccc caggctgtga gcagataaag ccttgcgtgg cttcacaaca gtgactgggt  
 180  
 ctgagaaca ggtccttgta caagcgacag ggagtgtca caccagatgt ggcagccct  
 240  
 ccacgccagg ctgtgtgggt cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc  
 300  
 gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta  
 360  
 aaacaacacc atccacgtct ggttccttag agcaaataga agcaccaggc tctgggtgcac  
 420  
 ggcgcgc  
 427

<210> 1926  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1926  
 Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg  
 1                                      5                                      10                                      15  
 Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val  
    20                                      25                                      30  
 Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His  
    35                                      40                                      45  
 Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser  
    50                                      55                                      60  
 Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu  
 65                                      70                                      75                                      80  
 Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu  
    85                                      90                                      95  
 Asn Arg Cys Leu Leu Glu Thr Leu  
    100

<210> 1927  
 <211> 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1927

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcataaa  
 60  
 acatctgctt tgacgggtgga ggcaaccagt agcatcaggg aaaaagttgt tgāagatcct  
 120  
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc  
 180  
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc  
 240  
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga  
 300  
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa  
 360  
 atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat  
 420  
 acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc  
 480  
 acttacgagg aggccaaagc acagcccttc acgcgt  
 516

&lt;210&gt; 1928

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5					10					15	
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35				40						45			
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
	50					55					60				
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65					70					75				80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
				85					90					95	
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
		100						105					110		
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
	115					120						125			
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
	130					135					140				
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145					150					155				160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
				165						170					

&lt;210&gt; 1929

&lt;211&gt; 843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1929

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nnccgcggac actcagggtc tggggtcctt cttccccaag aggcctgact gcctgggtgt
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tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgccacag cagaggctgg cttcctggtg ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacgggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcacctg cttggattcc
360
tcattttct ttttcttctt ggccccactc tcctcttga gggctctctg agggccccagc
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttggtggt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccg caggggtcca cctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgtgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctccc aggcaccgcc ttctcgtgct
720
tccagctctg ctcgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtgggtg gatcttgtag tcagtcatgg tgcccacctc ccaggaccct gagcaggaca
840
caa
843

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&lt;210&gt; 1930

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1930

```

Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1      5      10      15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20      25      30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35      40      45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50      55      60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65      70      75      80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85      90      95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

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100 105 110  
 Pro Leu Ser Ser Leu Arg Ala Leu  
 115 120

<210> 1931  
 <211> 719  
 <212> DNA  
 <213> Homo sapiens

<400> 1931  
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca  
 60  
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaaagcga agggagcact  
 120  
 gaagaggagg tggtagtggt tgcagaagc tgctgagaag ccagttagat aaagcggaga  
 180  
 agcttcctac taggacagct tcctcccage ccagtgtggc cacgctgggtg tcctcgggtga  
 240  
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc  
 300  
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcatcatgg  
 360  
 ttgcagagga agggaaggaa gcccacggct gccttgggga gctttctgaa aggcaggtct  
 420  
 gatcatgcct ctctgggcta cggctcctc acggtggctc ctggttgga ctgaagtgg  
 480  
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggccccag  
 540  
 cagggtgcc cccttgcaac acttcttttc ccacatgatc gtgccttcca aacctacttc  
 600  
 cagcgtcgcc ctcttcaggg agcctttcat aaccacctct cccttcact ggctaaagat  
 660  
 gaggttgagc aactgcagga cttgggacct tgttcctgcc cctgtggctg cctggatcc  
 719

<210> 1932  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1932  
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr  
 1 5 10 15  
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp  
 20 25 30  
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe  
 35 40 45  
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe  
 50 55 60  
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg  
 65 70 75 80  
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala  
 85 90 95  
 Trp Ile



<210> 1933  
 <211> 295  
 <212> DNA  
 <213> Homo sapiens

<400> 1933  
 ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg  
 60  
 atgctgccgg gggataacgg cctcttgetg tgccagcgcc tgcgccagca atacgcaaca  
 120  
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgate gcgtgggggg cctggaaatg  
 180  
 ggcgccgatg actacctgaa caaacctttc gatgcccggtg aattacttgc cggggtgcgc  
 240  
 gctgtactgc gtccggcggtg tgaaaaccga ccgacgttg ggcacgtgtc gcgcc  
 295

<210> 1934  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1934  
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile  
 1 5 10 15  
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln  
 20 25 30  
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met  
 35 40 45  
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp  
 50 55 60  
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg  
 65 70 75 80  
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val  
 85 90 95  
 Ser Arg

<210> 1935  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 1935  
 accggtgtgg cgggcgcggc cttcaccacc atcggtccca cggggccgac ggcgggttcg  
 60  
 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc  
 120  
 cccatgcct cggcgttcgt gattgccag acccaatcgc tgcggagtt tttcctcagt  
 180  
 ggctcgatgg ccaaggtgct gaccttgctg tcggtgatcc tgatcctgat gctgcgcccg  
 240

caaggggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca  
298

<210> 1936

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1936

Thr	Gly	Val	Ala	Gly	Ala	Ala	Phe	Thr	Thr	Ile	Gly	Ser	Thr	Gly	Pro
1				5					10					15	
Thr	Ala	Gly	Ser	Gln	Tyr	Ile	Val	Asp	Thr	Phe	Leu	Val	Val	Val	Phe
			20					25					30		
Gly	Gly	Ala	Gln	Ser	Leu	Phe	Gly	Pro	Ile	Ala	Ser	Ala	Phe	Val	Ile
		35					40					45			
Ala	Gln	Thr	Gln	Ser	Leu	Ser	Glu	Phe	Phe	Leu	Ser	Gly	Ser	Met	Ala
		50				55					60				
Lys	Val	Leu	Thr	Leu	Ser	Ser	Val	Ile	Leu	Ile	Leu	Met	Leu	Arg	Pro
65					70				75					80	
Gln	Gly	Leu	Phe	Ser	Ile	Lys	Val	Arg	Lys						
					85				90						

<210> 1937

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1937

gcacggcgca cagtaacacc aactcgaaaag agaccttatg aatgcaaggt gtgcgggaaa  
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gcctttaatt ctccaattt atttcaaata catcaaagaa ctcaactgg aaagaggtcc  
120  
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga  
180  
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat  
240  
cccagtttat ttcaaattca tgttagaact cactctggag aaaaacccta caaatgtaaa  
300  
caatgtggta aagccttcac ttccgcaggt tacgttcgga cacatgaaat cagatctcac  
360  
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc  
420  
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac  
480  
caagtcttta gatgtccac gtcccttcac gcg  
513

<210> 1938

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1938

Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

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      1           5           10           15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln
      20           25           30
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg
      35           40           45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr
      50           55           60
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr
      65           70           75           80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro
      85           90           95
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val
      100          105          110
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys
      115          120          125
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His
      130          135          140
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp
      145          150          155          160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala
      165          170

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&lt;210&gt; 1939

&lt;211&gt; 1233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1939

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gccggcagcg cgcgtcccca gggagggagt cgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctgttgatg tcctgtacag atgggatgtc agtcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta gggtatatct taagtgtggt gctgctaaca ttgccaggc
300
agcatctggt tcagctttat ctatattttt tgactgctct gtcctcttat gctggacatc
360
aaatttccag ggactatggt cggagtgaac tggggtttgc ctatgagga ccaatgtatt
420
tagaacctct ctctatgaat cgggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggtt gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagtctctt attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tgggtcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tgttcttttc atggttttct
780

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ggctcgtctt atttgetctt cagatttact cctatttcag tactcgagat cagcctgcat  
 840  
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta  
 900  
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt  
 960  
 tategttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac  
 1020  
 ctaggtttgg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat  
 1080  
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt  
 1140  
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt  
 1200  
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 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg	1	5	10	15
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser	20	25	30	
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu	35	40	45	
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile	50	55	60	
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu	65	70	75	80
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile	85	90	95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro	100	105	110	
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile	115	120	125	
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys	130	135	140	
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu	145	150	155	160
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met	165	170	175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu	180	185	190	
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val	195	200	205	
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln	210	215	220	
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala	225	230	235	240
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg				

Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg  
245 250 255  
260 265

```
<210> 1941
<211> 411
<212> DNA
<213> Homo sapiens
```

```
<400> 1941
ctggggccct gccccacagc atcatgatgg ggaaactccc cctgggggtc gtctcccctt
60
atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
120
gcacagccta cggtcggggag gatttcaagc cccgtgtggg cagtcacgta ggcacoggct
180
acaaatcaaa tttccagccc gtggtctcat gccaaaggcag tctggaggcc ttagacaacc
240
cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
300
ccctggaggt gcctgacggc aagcatcccc tgccttgagg catgcgccag accagctcag
360
gctatgggcg ggagaagccc agtgcgggtc cccccaccaa ggaggtcgga a
411
```

```
<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens
```

```
<400> 1942
Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
   1                               5               10             15
Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
           20                   25                 30
Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
          35                     40                   45
Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
      50                      55                    60
Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
65                          70                  75                80
Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
            85                        90              95
Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
         100                       105                    110
Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
        115                         120                     125
Arg
```

```
<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens
```

&lt;400&gt; 1943

nagaaacatt caggggtcca acaggggtgga aaacatgagg ctgcaggatg tttacacagga  
 60  
 gtcttttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc  
 120  
 acacagatgt acatggcata gcactgcca aaagtatcag cccaaggaac cctactttcc  
 180  
 ccagcaacat ctaactcaga aatgctgatc tttggcctca atctgggtccc aaaatacctc  
 240  
 caggggtattt tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact  
 300  
 ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc  
 360  
 ctctgcaatc tcacctgcta gagacg  
 386

&lt;210&gt; 1944

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10					15	
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50					55				60					
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
			85					90						95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105						110	

&lt;210&gt; 1945

&lt;211&gt; 443

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1945

nacgcgtcac gaagcgcgct cggcccacgt ggctccaagg gcgtccacgc gcccctcctc  
 60  
 gaccgattgg tgtcgaacat ggcacggtgg catgcgacgc gcaccaagat ccagctcaag  
 120  
 ctgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg  
 180  
 cgactggaaa ttggggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc  
 240  
 gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt  
 300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg  
 360  
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta  
 420  
 catgtgctcc aaaacatgct gaa  
 443

<210> 1946

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1946

Xaa	Ala	Ser	Arg	Ser	Ala	Leu	Gly	Pro	Arg	Gly	Ser	Lys	Gly	Val	His
1			5					10					15		
Ala	Pro	Leu	Leu	Asp	Arg	Leu	Val	Ser	Asn	Met	Ala	Arg	Trp	His	Ala
		20					25					30			
Thr	Arg	Thr	Lys	Ile	Gln	Leu	Lys	Leu	Ala	Ile	Gln	Arg	Xaa	Gly	Met
	35					40					45				
Leu	Gln	Glu	Lys	Lys	Ala	Ala	Leu	His	Lys	Lys	Val	Arg	Leu	Glu	Ile
	50					55					60				
Ala	Asp	Xaa	Arg	Arg	Arg	Gln	Lys	Leu	Glu	Ser	Ala	Arg	Val	Lys	Thr
65				70						75				80	
Glu	Ser	Leu	Ile	Met	Asp	Asp	Ile	His	Leu	Glu	Leu	Leu	Glu	Leu	Leu
		85						90					95		
Glu	Leu	Tyr	Cys	Glu	Thr	Leu	Tyr	Ala	Arg	Phe	Gly	Leu	Leu	Glu	Gly
		100						105				110			
Arg	Asp	Asn	Glu	Pro	Asp	Asp	Ala	Ile	Arg	Glu	Pro	Met	Ile	Ala	Ile
		115					120					125			
Ile	His	Ala	Ala	His	Arg	Thr	Glu	Val	Lys	Glu	Leu	His	Val	Leu	Gln
	130					135					140				
Asn	Met	Leu													

<210> 1947

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1947

cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgtg taggcgggag  
 60  
 gactgtgccg caggtgcagg agggtcagat ggaacaacaaa ggcgcaggcg gcctccacaa  
 120  
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctggggc atgaggtctt  
 180  
 gcagcaggtg caggtcactg agctcccagg ccagcagag gcgcgtcagg gtgcaggcgg  
 240  
 cctgcatgcc cagccccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg  
 300  
 ccatgaggaa ctccctgcagg gacacggtgg ggttggccga gggcccgtcc aaggtgaccc  
 360  
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag  
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag  
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5				10						15	
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
			20					25					30		
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
		35					40				45				
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55				60					
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65					70					75				80	
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
				85					90					95	
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100					105					110		
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115					120					125			
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
		130				135					140				
Val	Thr	Ala	Tyr	Thr	Ala										
145					150										

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcggttgag ggaggcgaca tgcttcatga gcgcttgggc ccaactgctca agcgacatct  
60  
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct  
120  
ccggatgcct cgacgggacg ctcaacaagct tccattggcc attcgcggtt cgcttggtct  
180  
cgaccgcgcg tacaaccggg tctacatggt cgccatgcc aatggcattc  
240  
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca  
300  
gccggtcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgactccaag  
360  
atccgcgct gcgtccagct tgacggcgcc ggggtt  
395

<210> 1950

<211> 125

<212> PRT



<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

```

cggccgcccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggtcgggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct ggcggttccg ggccagcgga gccacctcgt attcgctgga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg gggtgccgat gcctacgcgg tgctggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1              5              10              15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20              25              30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35              40              45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50              55              60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65              70              75              80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85              90              95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100              105

```

<210> 1955  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg  
 60  
 tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt  
 120  
 ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa  
 180  
 ccgccaaaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac  
 240  
 aatggaaaac atggatactc ccagtcacaca acggcaccgt gtccgagttt ttcacccaac  
 300  
 aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa  
 360  
 acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac  
 415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
		20						25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
		50				55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65					70					75				80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
				85					90					95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105				110			
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120					125			

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac  
 60  
 caggagctcc tcctgtgag gacaaagttc cagagtcggg gtcacgggcc ttacttattg  
 120  
 gggaggaggc ccgccggggc cgcaagtggc gaggggccct tggcgcgctc ctgggaggtc  
 180  
 agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatattcg  
 240  
 ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt  
 300

ggggaccctg gggaaggcgc caacttctct cctctgcca cctcactccc cgcgggcgtc  
 360  
 cctgggcccgc ctgcccgggc cgcactgggc ggcctccatc gtcccttccc tctacctgca  
 420  
 ctgccccagg cgaggagagag gccttggccc nncgaggac cagctgcagc gggcagcggg  
 480  
 gtcctgctcc cccaaccccc gcccatggc acggggctga accggt  
 526

<210> 1958  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<400> 1958  
 Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro  
 1 5 10 15  
 Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser  
 20 25 30  
 Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala  
 35 40 45  
 Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr  
 50 55 60  
 Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg  
 65 70 75 80  
 Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala  
 85 90 95  
 Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu  
 100 105 110  
 Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala  
 115 120 125  
 Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala  
 130 135 140  
 Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Ala Gly Ser Gly  
 145 150 155 160  
 Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg  
 165 170 175

<210> 1959  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 1959  
 gtgcaccgga cggctcctcc aacggatcat ggcacggccc agcgggaaggc tcacccgagt  
 60  
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatccac gacatggtga  
 120  
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg  
 180  
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg  
 240  
 aggtccttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct  
 300

cgtctgcctc gggatgaattg ccgaggaggt acatcttgcc tggaccgta atcgcggtga  
 360  
 agtcgacgcg caacgcgt  
 378

<210> 1960  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 1960  
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu  
 1 5 10 15  
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser  
 20 25 30  
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala  
 35 40 45  
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly  
 50 55 60  
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys  
 65 70 75 80  
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro  
 85 90 95  
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala  
 100 105 110

<210> 1961  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 1961  
 ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg  
 60  
 tccaacctgg tcaactgtgtt tgagaatagc aggaccccag aagcagcacc cagaggccag  
 120  
 aggctagagg acgtgcatca ccgcctgag tgcaggcctc ccgagtcacc aggaccacgg  
 180  
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac  
 240  
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg  
 300  
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag  
 360  
 acagagcagg cctatgtggc gcgc  
 384

<210> 1962  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1962  
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

```

      1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115          120          125

```

&lt;210&gt; 1963

&lt;211&gt; 323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1963

```

nnncccttcc taccctccca tactcccccac ccctcttctc ccccctgtgc tgagcttgca
60
ggcatgaaac acccacctgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggtcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcattgcac tcgcggggccc ccttcagacc tctcgggggc atcttccctc
240
tccctggcca ttatttttct tcatctgggc tgggcccgga ggggcgttcc ccccttctc
300
cttcttttct tttttttctc ttt
323

```

&lt;210&gt; 1964

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1964

```

Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
      1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

```

100

105

<210> 1965  
<211> 1416  
<212> DNA  
<213> Homo sapiens

<400> 1965  
cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttgtg  
60  
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct  
120  
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1380

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1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

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		20						25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
	35					40						45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
50					55					60					
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu
65				70					75					80	
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
		85						90						95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
		100						105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
	115					120						125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
130					135						140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145				150					155					160	
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
		165						170						175	
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
		180					185						190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
	195					200					205				
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
210					215						220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225				230					235					240	
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
		245						250						255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260					265						270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp	
	275					280					285				
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
290					295						300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305				310					315					320	
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
		325						330						335	
Arg	Lys	Leu	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala
		340					345					350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu



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      355      360      365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
  370      375      380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385      390      395      400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
      405      410      415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
      420      425      430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
      435      440      445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
      450      455      460
Glu Ala Glu Glu Glu Ala Ser Arg
465      470

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<210> 1967  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

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<400> 1967
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120
tgcattcacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc
180
ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggg
240
tagtggactg taccggatct catttggtcg accggaccgc cttagatagg gcgcttcgca
300
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401

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<210> 1968  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

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<400> 1968
Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
  1      5      10      15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
      20      25      30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
      35      40      45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
      50      55      60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65      70      75      80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1969  
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 gaggtcgccg ttcaccgcgt cacggatgct gtcaccctgc tcggtcacgt cgccaacacc  
 120  
 caggtcatgg cgaccagcg tgatctcaaa ccgtcagtat tcgtcaacct ctctcctcg  
 180  
 gaaggacttc ctgtatcaat gatggagggt gcttccctcg gtatcccat tatcgcgact  
 240  
 ggcgtggcg gagtaggaga aatcgtctcg tctgacaacg ggcattatt gcctgccgag  
 300  
 ttcaccgaca cccaggcatc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag  
 360  
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagttccg cgctctgtc  
 420  
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 464

<210> 1970  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1970  
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp  
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 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr  
 20 25 30  
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp  
 35 40 45  
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro  
 50 55 60  
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr  
 65 70 75 80  
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu  
 85 90 95  
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln  
 100 105 110  
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser  
 115 120 125  
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu  
 130 135 140  
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp  
 145 150

<210> 1971  
 <211> 520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1971

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60
acagaagtac tcagggttgtt tgtgtgttga ccgagagaac agctcagatt gaggaacgag
120
acagacgacg acaaaaaacaa ttagagcatc agttgataca atacaaatgg aatataatgc
180
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240
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300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
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420
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520

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&lt;210&gt; 1972

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1972

```

Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
 1             5             10             15
Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
      20             25             30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
      35             40             45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
      50             55             60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
      65             70             75             80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
      85             90             95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
      100            105            110
Glu Lys Gln Thr Lys Gln
      115

```

&lt;210&gt; 1973

&lt;211&gt; 331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1973

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acgcgtacct atgcccagcg catggcggat cagttgaccg cggcactagg cagctactta
60

```

tccgcagggtc aaaagaaatc ggacggcctc ggatccttct tcgtggccac tacccttgaa  
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 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc  
 180  
 cccgctcgat ctttctccgc ttgggcgctg cgcggaacga ctttttctgc gccgtcgatg  
 240  
 acaaaggctt cccgctcgag ctcgcccgca ccaagcgac cgctcgctg tggcaaaagc  
 300  
 tggcgctcgc cgccagtga atcgtgtgca c  
 331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

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Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
			20					25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35				40					45				
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55					60				
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65				70						75				80	
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85						90					95	
Pro	Pro	Val	Lys	Ser	Cys	Ala									
			100												

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 120  
 agaaggcggg tgccgacacg gcgagccgct agcaggagat ttgcgatgcg ctggcgcaga  
 180  
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 240  
 ctcgactggg gcaggccgcc tcggaggcgc caaaggctgc tgccgaagtg gttgccgagc  
 300  
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 360  
 cgcgtgctgg  
 370

<210> 1976

<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1976  
 Met Arg Val Arg Ser Ser Ser Ile Ala Arg Val Ala Asp His Ala Val  
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 Gly Gln Leu Leu Ala Gln Leu Gly Asn His Phe Gly Ser Ser Leu Trp  
 20 25 30  
 Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val  
 35 40 45  
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg  
 50 55 60  
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg  
 65 70 75 80  
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile  
 85 90 95  
 Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu  
 100 105 110  
 Gln Leu His Glu Arg Leu Ala Arg Arg  
 115 120

<210> 1977  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

<400> 1977  
 ccgcgggcag gtggcatgtg ggctgagccc cgaagaaagt caaaagataa ggaagaggac  
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 aggtttctag gaagaagttg gctgagcagg agttgggcag gttaagagct ggggtgagggg  
 120  
 agagaggaga caggcagcca ggctgttaca cagggaggag cacaggaggt gcacgggagg  
 180  
 agccaagcgg gagggcaggc aatggccagg ttggaagatc tgcacctccc tggttactgg  
 240  
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 300  
 actggatgaa aaaggtgccca caactgagac cagaaggcag attcctgaac tgggtggggtg  
 360  
 ccaaggatgc atatcaaaga ctgctggaac atgtgggtat caagattgaa gacagtgaag  
 420  
 gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactgggtgac tgctcttccc  
 480  
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 540  
 cagactcatg a  
 551

<210> 1978  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1978

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Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
 1          5          10          15
Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
          20          25          30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
          35          40          45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
          50          55          60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
65          70          75          80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
          85          90          95
Gln Pro Thr Ser Ser
          100

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&lt;210&gt; 1979

&lt;211&gt; 5530

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1979

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120
actatgctgc tcgggtgggc gtccctgctg ctgtgcgctg tccgcctgcc cctggcgcgc
180
gtcggccccg ccgcgacacc tgcccaggat aaagccgggc agcctccgac tgctgcagca
240
gccgccagc cccgccggcg gcagggggag gaggtgcagg agcgagccga gcctcccggc
300
cacccgcacc ccctggcgca gcggcgagc agcaaggggc tgggtgcagaa catcgaccaa
360
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480
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540
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900
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960

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cggttgatg gccggggcct gcagcattac ctgctgacct tggcctccat cgccaatagg  
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1080  
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1140  
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1560  
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1920  
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1980  
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2040  
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ccagcggatg tgtgcaagct gacctgcaga gccaaaggca ctggctacta tgtggtatct  
2160  
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2220  
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2640  
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&lt;210&gt; 1980

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1980

Met Leu Leu Gly Trp Ala Ser Leu Leu Leu Cys Ala Phe Arg Leu Pro

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Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly
35           40           45
Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu
50           55           60
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu
65           70           75           80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg
85           90           95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly
100          105          110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser
115          120          125
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala
130          135          140
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His
145          150          155          160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu
165          170          175
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val
180          185          190
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala
195          200          205
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg
210          215          220
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln
225          230          235          240
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg
245          250          255
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu
260          265          270
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His
275          280          285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala
290          295          300
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu
305          310          315          320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr
325          330          335
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp
340          345          350
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp
355          360          365
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly
370          375          380
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly
385          390          395          400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly
405          410          415
Leu Ser His Asp Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr
420          425          430
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser

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435				440				445							
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Tyr	Ser	Thr	Ser	Ser	His	Gly	Asn	Trp	Gly	Ser	Trp	Gly	Ser	Trp	Gly
565				570				575							
Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His
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Cys	Asn	Asn	Pro	Ala	Pro	Arg	Asn	Asn	Gly	Arg	Tyr	Cys	Thr	Gly	Lys
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Arg	Ala	Ile	Tyr	His	Ser	Cys	Ser	Leu	Met	Pro	Cys	Pro	Pro	Asn	Gly
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Lys	Ser	Phe	Arg	His	Glu	Gln	Cys	Glu	Ala	Lys	Asn	Gly	Tyr	Gln	Ser
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Thr	Gly	Tyr	Tyr	Val	Val	Phe	Ser	Pro	Lys	Val	Thr	Asp	Gly	Thr	Glu
675				680				685							
Cys	Arg	Pro	Tyr	Ser	Asn	Ser	Val	Cys	Val	Arg	Gly	Lys	Cys	Val	Arg
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Arg	Phe	Thr	Ala	Tyr	Leu	Ala	Leu	Lys	Lys	Lys	Asn	Gly	Glu	Tyr	Leu
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Ile	Asn	Gly	Lys	Tyr	Met	Ile	Ser	Thr	Ser	Glu	Thr	Ile	Ile	Asp	Ile
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Asn	Gly	Thr	Val	Met	Asn	Tyr	Ser	Gly	Trp	Ser	His	Arg	Asp	Asp	Phe
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Leu	His	Gly	Met	Gly	Tyr	Ser	Ala	Thr	Lys	Glu	Ile	Leu	Ile	Val	Gln
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Ile	Leu	Ala	Thr	Asp	Pro	Thr	Lys	Pro	Leu	Asp	Val	Arg	Tyr	Ser	Phe
835				840				845							
Phe	Val	Pro	Lys	Lys	Ser	Thr	Pro	Lys	Val	Asn	Ser	Val	Thr	Ser	His
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<210> 1983
<211> 383
<212> DNA
<213> Homo sapiens
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 240  
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 383

&lt;210&gt; 1984

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1984

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			20					25				30			
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35				40					45				
Phe	Ile	Asp	Ile	Ile	Gly	Ser	Thr	Lys	Leu	Ser	Leu	Glu	Tyr	Asp	Ser
	50				55				60						
Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
65				70				75				80			
Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
			85					90				95			
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
		100					105				110				
Ala	Ser	Leu	Tyr	Cys	Ala	Arg	Val	Val	Met	Asn	Arg	Phe	Asp	His	
		115					120					125			

&lt;210&gt; 1985

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1985

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 180  
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 240

cagaaccgaa gaaatatttt gcatgcgaaa ctcaattgag ccttcagtac ggccaaccaa  
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 381

<210> 1986

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1986

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Asn	Arg	Leu	Leu	Arg	Gln	Gly	Pro	Leu	Val	Gly	Arg	Thr	Glu	Gly	Ser
		20						25					30		
Ile	Glu	Phe	Arg	Met	Gln	Asn	Ile	Ser	Ser	Val	Leu	Val	Gln	Met	Gly
	35					40					45				
Leu	Asp	Arg	Ile	Lys	Gly	Tyr	Lys	Ala	Cys	Glu	Pro	Met	Trp	Gly	Pro
	50					55					60				
Gly	Gly	Arg	Pro	Thr	Thr	Phe	Ala	Arg	Pro	Phe	Ala	Asp	Thr	Arg	Val
65					70					75				80	
Phe	Glu	Ser	Asp	Glu	Thr	Ala	Gln	Thr	Ala	Asp	Glu	Gln	Thr	Leu	Ile
			85						90					95	
Arg	Arg	Ala	Asn	Lys	Leu	Gln	Leu	Lys	Arg	Phe	Asp	Gln	Val	Pro	Asp
			100					105					110		
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	115					120									

<210> 1987

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1987

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 240  
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 aatgcgggga cccatncggc tcagctatct aactgcttcg tcatgcgcac tgaggacaat  
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 419

<210> 1988

<211> 139

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1988

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 Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg  
 35 40 45  
 Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg  
 50 55 60  
 Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala  
 65 70 75 80  
 Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly  
 85 90 95  
 Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys  
 100 105 110  
 Phe Val Met Arg Thr Glu Asp Asn Leu Glu His Ile Ala Gln Thr Ile  
 115 120 125  
 Arg Asp Val Met Trp Ile Thr Lys Gly Thr Val  
 130 135

&lt;210&gt; 1989

&lt;211&gt; 10795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1989

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 120  
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 180  
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Pro	Met	Pro	Thr	Pro	Thr	Leu	Val	Arg	Pro	Leu	Leu	Lys	Leu	Val	His																																	
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Ser	Pro	Ser	Pro	Glu	Val	Ser</																																										



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Pro Pro Leu Ala Pro Leu Pro Val Leu Ala Pro Ser Pro Gly Ala Ala
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Thr Pro Val Leu Ala Pro Ser Ser Thr Gln Thr Met Leu Pro Ala Pro
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 His Arg Ala Val Leu Phe Pro Gln Gln Arg Leu Asp Gln Leu Ser Glu  
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 Tyr Arg Leu Ile Ser Glu Arg Thr Val Glu Glu Asn Ile Leu Lys Lys  
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 Ala Asn Gln Lys Arg Met Leu Gly Asp Met Ala Ile Glu Gly Gly Asn  
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 Phe Thr Thr Ala Tyr Phe Lys Gln Gln Thr Ile Arg Glu Leu Phe Asp  
                                  1940                      1945                      1950  
 Met Pro Leu Glu Glu Pro Ser Ser Ser Ser Val Pro Ser Ala Pro Glu  
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 Glu Glu Glu Glu Thr Val Ala Ser Lys Gln Thr His Ile Leu Glu Gln  
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Glu	Ala	Ala	Arg	Lys	Asp	Leu	Asp	Gln	Ala	Lys	Glu	Glu	Val	Phe	Arg
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&lt;210&gt; 1991

&lt;211&gt; 3102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1991

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<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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Gly	Leu	Ser	Ser	Phe	Lys	Pro	Leu	Pro	Arg	Pro	Pro	Pro	Leu	Ala	Gln					
405										410					415					
Gly	Asn	Asp	Leu	Pro	Leu	Gly	Gln	Pro	Arg	Lys	Leu	Gly	Arg	Glu	Asp					
420										425					430					
Leu	Gln	Pro	Pro	Ser	Ser	Met	Pro	Ser	Cys	Ser	Gly	Thr	Val	Phe	Ser					
435										440					445					
Ala	Pro	Gln	Asn	Arg	Ser	Pro	Pro	Ala	Gly	Thr	Ala	Pro	Thr	Pro	Gly					
450										455					460					
Thr	Ser	Ser	Ala	Gln	Asp	Leu	Pro	Ser	Ser	Pro	Ile	Tyr	Ala	Ser	Val					
465	470										475					480				
Ser	Pro	Ala	Asn	Pro	Ser	Ser	Lys	Arg	Pro	Leu	Asp	Ala	His	Leu	Ala					
485										490					495					
Leu	Val	Asn	Gln	His	Pro	Ile	Gly	Pro	Phe	Pro	Arg	Val	Gln	Ser	Pro					
500										505					510					
Pro	His	Leu	Lys	Ser	Pro	Ser	Ala	Glu	Ala	Thr	Val	Ala	Gly	Gly	Cys					
515										520					525					
Leu	Leu	Pro	Pro	Ser	Pro	Ser	Gly	His	Pro	Asp	Gln	Thr	Gly	Thr	Asn					
530										535					540					
Gln	His	Phe	Val	Met	Val	Glu	Val	His	Arg	Pro	Asp	Ser	Glu	Pro	Asp					
545	550										555					560				
Val	Asn	Glu	Val	Arg	Ala	Leu	Pro	Gln	Thr	Arg	Thr	Ala	Ser	Thr	Leu					
565										570					575					
Ser	Gln	Leu	Ser	Asp	Ser	Gly	Gln	Thr	Leu	Ser	Glu	Asp	Ser	Gly	Val					
580										585					590					
Asp	Ala	Gly	Glu	Ala	Glu	Ala	Ser	Ala	Pro	Gly	Arg	Gly	Arg	Gln	Ser					
595										600					605					
Val	Ser	Thr	Lys	Ser	Arg	Ser	Ser	Lys	Glu	Leu	Pro	Arg	Asn	Glu	Arg					
610										615					620					
Pro	Thr	Asp	Gly	Ala	Asn	Lys	Pro	Pro	Gly	Leu	Leu	Glu	Pro	Thr	Ser					
625	630										635					640				
Thr	Leu	Val	Arg	Val	Lys	Lys	Ser	Ala	Ala	Thr	Leu	Gly	Ile	Ala	Ile					
645										650					655					
Glu	Gly	Gly	Ala	Asn	Thr	Arg	Gln	Pro	Leu	Pro	Arg	Ile	Val	Thr	Ile					
660										665					670					
Gln	Arg	Gly	Gly	Ser	Ala	His	Asn	Cys	Gly	Gln	Leu	Lys	Val	Gly	His					
675										680					685					
Val	Ile	Leu	Glu	Val	Asn	Gly	Leu	Thr	Leu	Arg	Gly	Lys	Glu	His	Arg					



690	695	700
Glu Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp		
705	710	715
Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu		720
	725	730

<210> 1993  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

<400> 1993  
 nngaaaacct acgggatgac acgtgccctc gatcacatcg acatcgccat cccagctggc  
 60  
 cagtcgggtcg ccgtcatggg gccgtccggg tcaggcaaga ccaccctgct gcactgcttg  
 120  
 tcggggatcc tctcgctga ctccggcagt atcgaactgg ctctgccgga cgcaccgtc  
 180  
 aacgtcgaaa acctctctaa cgaaggccga gcaaagctac gccgtcaatc ccttggtttc  
 240  
 gtcttccaac aaggaatgct cgtacccgag ctactgctg tcgagaacac cgccctaccc  
 300  
 ctcatgctta acggcgtatc ccaaaccgat gcggtcaggt atgccaccca atggcttgaa  
 360  
 tcgatggggg taggcggcat ggaggatcgt cggattgggt agctctccgg gggccaagct  
 420  
 caacgcgtca ctattgccg gtcccaggta atcgatccgt cgattgtctt cgctgacgaa  
 480  
 cccaccggag ccctcgactc agccaccgcc gtcgaagtca tggccattct gctttcggcg  
 540  
 acgaccgggc ggggacgcac cctcgtcgtc gtcacccatg acgaggacgt tgcccgcgcg  
 600  
 tgccagcgca tccttcatct gcacgacggt cggatcgtct ctgaccacgt acgtcattcc  
 660  
 gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa  
 720  
 ggatcccgtc cctccccgtc cccgagcccc tgggagctac gcccggaagt cttaccactg  
 780  
 ctgcgatcct cagcatgacc ctccgtgcct cagccgctga cactccacc tggcggttgc  
 840  
 cggtagttgc ttctgctgtc attgcaacca tcatectcga cgtcactggc ggtgccgtca  
 900  
 tgatgtggca tctaccggga gacaactctg gcttctacaa gctgacctcg acaattg  
 957

<210> 1994  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1994  
 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala  
 1 5 10 15  
 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

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<210> 1995
<211> 285
<212> DNA
<213> Homo sapiens
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<400> 1995
catcaccacc attatcaaca ccatcatcac caccattatc acctttatca ccaccatcat
60
caccatcacc accatcatca ctaccacccat cacgcccata atcatgtgat gactctcaat
120
actgtcctca tcatgtgtga cttggactgt ggaccagccc ctcgggctct gctctgctga
180
cctatatctt ttgtctcttg ttcttgagaa gctgggagtt gagaccaggt aagggtgttg
240
acagacactt gtgaccccaa attccatgag acagaggacc tcccn
285
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<210> 1996
<211> 59
<212> PRT
<213> Homo sapiens
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<400> 1996
His His His His Tyr Gln His His His His His His Tyr His Leu Tyr
 1                    5                    10                   15
His His His His His His His His His His Tyr His His His Ala
 20                    25                   30
His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

```

35
40  
 Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys  
50
55

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<210> 1997
<211> 313
<212> DNA
<213> Homo sapiens
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<400> 1997
ccgctggtgg tgggtgctgct gattggcatg gccatctata ccttcgcgaa gaaagacctg
60
ggcaagctgc acaagccggg cagcatcggc cggcgcgaga tgctggtggg gctggccatc
120
ggtggcgga tcggttttta cgacggcctg ttcgggcccgg gtaccggcag tttcctgatg
180
ttcctgttcg tcggtttttt gcgttttgat ttcttgcatg cttctgccgc ggccaagggt
240
gtcaacctgg ccaccaatgt ggcggcactg tgctttttca tcccagcgg caatgtgctg
300
tatggctacg cgt
313
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<210> 1998
<211> 104
<212> PRT
<213> Homo sapiens
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<400> 1998
Pro Leu Val Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg
 1                    5                      10                15
Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg
 20                      25                      30
Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp
 35                      40                      45
Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
 50                      55                      60
Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val
65                      70                      75                80
Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser
 85                      90                95
Gly Asn Val Leu Tyr Gly Tyr Ala
100

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<210> 1999
<211> 399
<212> DNA
<213> Homo sapiens
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<400> 1999
ccgcgggcgca agttggaatg gcaaaacatt ttcattcccc gcgagcaagg tagcttgagt
60
tccactgcgc agagggcaga tgtgaagtac tccggtactg ttcattttac cgggtgttggc
120
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ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat  
 180  
 gtgattatgt ctgtgaagtc caagactatg gtcgggcagt tggttgacta tggccgtata  
 240  
 acttttcgttg atatgaccgg ctctattacg caggggtcaaa acgatgcagc tcagggttggtg  
 300  
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct  
 360  
 ggaaagccca tggatgacat cgattcgtcc ttaaagctt  
 399

<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
1				5					10					15	
Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
			20				25						30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50				55					60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65				70					75					80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
				85					90						

<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

nngaataag gacgtcataa tttgctgac agcagtgcag ctgactggag gagggacaaa  
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 tttggcagga cccactgca ctatgcagct gctaacggta gctaccagtg tgcagtaaca  
 120  
 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac  
 180  
 tacgctgccg cttctgacac ttacaggnag agcggaaccc catacacctt ccagccatga  
 240  
 tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg  
 300  
 gagttcttac tggataacgg tgcagacccc tccctgcggg acaggcaggg ctacacagct  
 360  
 gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgctctt agaaatgtcc  
 420  
 tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc  
 480  
 tacaacggtc actgtgaagc cttgaagacg ctggcggaga cgctggtgaa tctggacgta  
 540

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggttc tactgagtgt  
 600  
 gtggaggtgc ttacagccca cggcgctctt gccctcatca aggagcgcaa gcgcaagtgg  
 660  
 acacccctgc acgccgtgc tgcctctggc cacttgact ccctgcactt gctgatcgac  
 720  
 agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg  
 780  
 ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggatccaca  
 840  
 gctgatgctg ctgacctccg gggccgcact gccctccacc gcggggcagt gactggctgt  
 900  
 gaggactgcc tggctgccct gctggaccac gacgcatttg tgctgtgccg agactttaag  
 960  
 ggccgcacgc ccattcacct ggcctcagcc tgtggccaca ctgcagtact gcggaccctg  
 1020  
 ctgcaggctg ccctttccac agatcccctg gatgccgggg tggattacag cggatactcg  
 1080  
 cccatgcact gggcctccta cactggacat gaagattgtc tggagttggt acttgaacac  
 1140  
 agcccggttt cgtacctgga aggaaacccc ttactcctt tgcactgtgc agtgattaat  
 1200  
 aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc  
 1260  
 cgagatgcca aaggacggac ccccttcac gccgtgcct tcgcggaaca tgtctctggg  
 1320  
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcc ctgaccacac tggccgcact  
 1380  
 gcgctcatga cggcggctga gaacgggcag accgctgctg tggaatttct gctg  
 1434

&lt;210&gt; 2002

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
1				5					10					15	
Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
			35				40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55				60					
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

&lt;210&gt; 2003

&lt;211&gt; 688

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2003

ntcattgacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcgatgtg  
 60  
 attgcagata ccattaagga gttgcaagat tcggccactt acaacagtct cctgcaagct  
 120  
 ttgagcaaaag agaggggaaaa caaaatgcat ttctatgaca tcatttccag ggaggaaaaa  
 180  
 ggaagaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa  
 240  
 tttgaagtcc agagtcagaa tgagtatatatt gctaacctca aggaccaact gcaagagatg  
 300  
 aaggcaaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc  
 360  
 cagacccaga aaaagtgtaa cagaacagag gaactcttgg tggaagagat tgagaaaact  
 420  
 aggatgaaaa ccgaagaaga ggcccggact catacagaga ttgaaatgtt ccttagaaaag  
 480  
 gagcagcagg tgggtcccca cagcttttct atgctttgac ttttttttg tactctgctt  
 540  
 atactgagga aacaaaaaga atattttgaa ggaaaaccaa ccatcattct ttcagcctaa  
 600  
 tgaacttttag ctcatgtttt ctttcagggt tatgcatctg aatagatatc ttatatagct  
 660  
 gtaatttgag agagtgcagg taaaattg  
 688

&lt;210&gt; 2004

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2004

Xaa	Met	Thr	Thr	Glu	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1				5					10					15	
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35					40					45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50					55					60				
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65					70				75					80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85					90					95		
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
			100					105					110		
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
	115						120					125			
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130					135					140				
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145					150					155				160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 2005  
 gctagcacca agccaagggt atgtttcctt gcttgcatgt ggggtttctg gccagtcagc  
 60  
 caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttgggtca  
 120  
 tcggagtcag gggtagcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga  
 180  
 agcccgcctg gtcacagggt ctctgaccg gctgggtagg gtttggcctt atcttacagc  
 240  
 cagtgtgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat  
 300  
 gtctactccc tgctttgggc tgtctgaaa acaattgcaa agacattgtg gctg  
 354

<210> 2006  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2006  
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu  
 1 5 10 15  
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu  
 20 25 30  
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe  
 35 40 45  
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly  
 50 55 60  
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg  
 65 70 75 80  
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu  
 85 90 95  
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala  
 100 105 110

<210> 2007  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 2007  
 nnacgcgtgc catgtgcatg tgttatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg  
 60  
 tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgcg  
 120  
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcatg  
 180  
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg  
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggt  
 300  
 ttgagtattg ctggtaggca gggacaactt tccgt  
 335

<210> 2008  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2008  
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val  
 1 5 10 15  
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa  
 20 25 30  
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met  
 35 40 45  
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile  
 50 55 60  
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val  
 65 70 75 80  
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe  
 85 90 95  
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser  
 100 105 110

<210> 2009  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

<400> 2009  
 gacatcaccc cgctgctggc caacccaac ggtttctccg cagcgatcga ggaactggtg  
 60  
 ctgcggtccc cagcgacat cgacgtggc gtcggcatgg aggcgcgagg cttcctcttc  
 120  
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtcgcaa gccggggaag  
 180  
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gacctcacc  
 240  
 gtccaccagt acgcatcaa gccgggggtcg cgcgtcatca tcgtcgac  
 288

<210> 2010  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2010  
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile  
 1 5 10 15  
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly  
 20 25 30  
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile



<210> 2013  
<211> 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2013

gcgtatcccc acggctacgg catgaccgcg cttatcgggc cggacctgtc caccgtcgaa  
 60  
 gccttgctcg cccagggtcca cagcacacaa accccgggtg acctggccaa tatcaatgcc  
 120  
 gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
 180  
 cgcggaacg gcgtcgccaa acgcttggcc gtcagcgtgc cgtcccattg tgcgctgctg  
 240  
 gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccnncn  
 300  
 nnnccnncn  
 309

&lt;210&gt; 2014

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
			20					25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
		35					40					45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65					70					75				80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85				90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
							100								

&lt;210&gt; 2015

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2015

acgcgtgcca tgctcggtat ccgcccgcac caccctgtct ttgggaccgg cgagttcacc  
 60  
 gatctaggcg ggccggacat ggcagtgatg tccttcctac gtcacaacga gcacgaaacg  
 120  
 gtctctgtgcc tggctaattc ctccgatact gagcggacgg ttgcccttca ccttccacaa  
 180  
 ttcgcgggcg tggcgggctc ttctctcctc catggtcagg acgcgcaacc agtaaaagct  
 240  
 gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
 300

gaggagaggt catgaccgct tgggaagac  
329

<210> 2016  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2016  
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr  
1 5 10 15  
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe  
20 25 30  
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser  
35 40 45  
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val  
50 55 60  
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala  
65 70 75 80  
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85 90 95  
Gln Met Ser Gly Glu Glu Arg Ser  
100

<210> 2017  
<211> 457  
<212> DNA  
<213> Homo sapiens

<400> 2017  
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120  
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180  
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240  
aactctgatg agctggagac cacagggtgcc gtcagttaca cagtggagct gaagcgctac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc  
360  
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420  
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457

<210> 2018  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2018  
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

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      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

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&lt;210&gt; 2019

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2019

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120
gactatctca acgtcatcag gggacatatc gacaccgatc ccggcctgac cgacgtcatc
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300
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480
ggc
483

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&lt;210&gt; 2020

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2020

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Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
      1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20           25           30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

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<210> 2021
<211> 797
<212> DNA
<213> Homo sapiens
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120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga caccgcgtcc
180
gggagccagt gttccgtcac ccagaagcc atactcaata atgaaaagct ggtcttgccg
240
ccccgcattc ccagagtga cggctggctg ttacccctgc actacttcca ggtgggtgacc
300
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420
aggggttcct ggaggaccct gcgatggacc tggctgtggg gtctgggcca tggctgcccg
480
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540
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600
gggagttccg gagaggggaat ctgtcaggag ggacagcagc cccctggcgt ggcgcaggac
660
ccgccctgct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc
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<210> 2022

<211> 135  
 <212> PRT  
 <213> Homo sapiens

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 Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn  
                   20                  25                  30  
 Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val  
                   35                  40                  45  
 Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu  
                   50                  55                  60  
 Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp  
   65                  70                  75                  80  
 His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp  
                   85                  90                  95  
 Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro  
                   100                  105                  110  
 Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu  
                   115                  120                  125  
 Met Val Leu Ala Ser Pro Gly  
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<210> 2023  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 2023  
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   120  
 actgctccgc gcatcattac cgtccacatc ccagtggaca agatcgggtga ggtcatcggc  
   180  
 cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag  
   240  
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<210> 2024  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 2024  
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Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile
      20           25           30
Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val
      35           40           45
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
      50           55           60
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
      65           70           75           80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
      85           90           95
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
      100          105          110
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
      115          120          125
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser
      130          135          140
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
      145          150

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&lt;210&gt; 2025

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

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300
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360
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420
acacgctgga ggctgctctc cgggtgttcc cactggggac cccagggtct gcacattcct
480
gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg
540
cgaaaaacca atggcgaaat attttgtcac agatgacctg caggttggtg tttacgcgct
600
gcgctccgca tttgttgact cgtaaatacac atcttgaaaa acagtcaaag aaattgcagt
660
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720
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840

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872

<210> 2026  
<211> 157  
<212> PRT  
<213> Homo sapiens

<400> 2026  
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Ala Ile Asp Val Asp Met Ala Phe Glu Pro Lys Met Arg Glu Ile  
35 40 45  
Leu Glu Gln Asn Cys Thr Gly Asp Glu Asp Cys Asn Phe Phe Asp Cys  
50 55 60  
Phe Ser Arg Cys Asp Leu Arg Val Asn Lys Cys Gly Ala Gln Arg Val  
65 70 75 80  
Asn Asn Asn Leu Gln Val Ile Cys Asp Lys Ile Phe Arg His Trp Phe  
85 90 95  
Ser Ala Pro Leu Lys Ser Ser Ala Val Ser Phe Gln Leu Gln Leu Gln  
100 105 110  
Leu Gln Glu Ala Val Gln Glu Cys Ala Asp Pro Gly Val Pro Ser Gly  
115 120 125  
Asn Thr Arg Arg Ala Ala Ser Ser Val Phe Trp Lys Leu Arg Gln Leu  
130 135 140  
Leu Gln Ala Thr Leu Arg Glu Leu Gln Glu Ala Glu Lys  
145 150 155

<210> 2027  
<211> 721  
<212> DNA  
<213> Homo sapiens

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120  
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180  
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300  
tctaattcct ttctttcact aatacatttg gactgctcta cagaattact tctgtctgat  
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gcaaacattt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagccac  
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540



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 721

<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

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			20					25				30			
Lys	Leu	Phe	Phe	Cys	Gln	Leu	Cys	Ile	Thr	Ser	Asp	Asp	Ile	Gly	Tyr
		35				40					45				
Ser	Cys	Arg	Leu	Lys	Phe	Lys	Ile	Gln	Val	Ala	Pro	Tyr	Ser	Ile	Phe
	50				55					60					
Leu	His	Lys	Glu	Arg	Leu	His	Val	Leu	Ile	Leu	Cys	Gly	Leu	Cys	Tyr
65				70					75					80	
Leu	Arg	Ser	Asn	Gln	Glu	Ser	Leu	Ile	Leu	Ser	Gln	Lys	Cys	Leu	Leu
			85					90					95		
Leu	Ile	Glu	Pro	Lys	Val	Asn	Gly	Tyr	Tyr	Met	Leu	Ala	Thr	Leu	Gln
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Ser	Gly														

<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

<400> 2029

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 420  
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ctagagtctc caaatccaga aaacaaggac tatgaagagc caaagaaagt acggaacca  
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&lt;210&gt; 2030

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2030

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 Ser Leu Ala Ser Ala Ser Ser Asp Glu Gly Ser Gln Asp Glu Ser  
 20 25 30  
 Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val Lys Asp His  
 35 40 45  
 Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu  
 50 55 60  
 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys  
 65 70 75 80  
 Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser

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Pro	Asn	Pro	Glu	Asn	Lys	Asp	Tyr	Glu	Glu	Pro	Lys	Lys	Val	Arg	Lys						
			100					105				110									
Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly	Thr	Ala	His	Gly	Glu	Pro	Cys	His						
			115					120				125									
Phe	Pro	Phe	Leu	Phe	Leu	Asp	Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp						
			130					135				140									
Gly	Arg	Glu	Asp	Gly	Arg	Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys						
			145	150				155				160									
Ala	Asp	Glu	Lys	Trp	Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys						
			165				170				175										
Arg	Arg	Gln	Met	Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys						
			180				185				190										
Ile	Leu	Asn	Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg						
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Tyr	Leu	Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg						
			210				215				220										
Val	Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln						
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			245				250				255										
Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	Val	Asn						
			260				265				270										
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			275				280				285										
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			290				295				300										
Ile	Gly	Val	Leu	Gln	Ser	Cys	Glu	Ser	Ala	Leu	Thr	His	Tyr	Arg	Leu						
			305				310				315				320						
Val	Ala	Asn	His	Val	Ala	Ser	Asp	Ile	Ser	Leu	Thr	Gly	Gly	Ser	Val						
			325				330				335										
Val	Gln	Arg	Ile	Arg	Leu	Pro	Asp	Glu	Val	Glu	Asn	Pro	Gly	Met	Asn						
			340				345				350										
Ser	Gly	Met	Leu	Glu	Glu	Asp	Leu	Ile	Gln	Tyr	Tyr	Gln	Phe	Leu	Ala						
			355				360				365										
Glu	Lys	Gly	Asp	Val	Gln	Ala	Gln	Val	Gly	Leu	Gly	Gln	Leu	His	Leu						
			370				375				380										
His	Gly	Gly	Arg	Gly	Val	Glu	Gln	Asn	His	Gln	Arg	Ala	Phe	Asp	Tyr						
			385				390				395				400						
Phe	Asn	Leu	Ala	Ala	Asn	Ala	Gly	Asn	Ser	His	Ala	Met	Ala	Phe	Leu						
			405				410				415										
Gly	Lys	Met	Tyr	Ser	Glu	Gly	Ser	Asp	Ile	Val	Pro	Gln	Ser	Asn	Glu						
			420				425				430										
Thr	Ala	Leu	His	Tyr	Phe	Lys	Lys	Ala	Ala	Asp	Met	Gly	Asn	Pro	Val						
			435				440				445										
Gly	Gln	Ser	Gly	Leu	Gly	Met	Ala	Tyr	Leu	Tyr	Gly	Arg	Gly	Val	Gln						
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His	Ala	Ser	Gly	Thr	Gly	Val	Met	Arg	Ser	Cys	His	Thr	Ala	Val	Glu
530					535					540					
Leu	Phe	Lys	Asn	Val	Cys	Glu	Arg	Gly	Arg	Trp	Ser	Glu	Arg	Leu	Met
545					550					555					
Thr	Ala	Tyr	Asn	Ser	Tyr	Lys	Asp	Gly	Asp	Tyr	Asn	Ala	Ala	Val	Ile
565					570					575					
Gln	Tyr	Leu	Leu	Leu	Ala	Glu	Gln	Gly	Tyr	Glu	Val	Ala	Gln	Ser	Asn
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Ala	Ala	Phe	Ile	Leu	Asp	Gln	Arg	Glu	Ala	Ser	Ile	Val	Gly	Glu	Asn
595					600					605					
Glu	Thr	Tyr	Pro	Arg	Ala	Leu	His	Trp	Asn	Arg	Ala	Ala	Ser	Gln	
610					615					620					
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645					650					655					
Ala	Ser	Glu	Gln	Gln	His	Ser	Ala	Gln	Ala	Met	Phe	Asn	Leu	Gly	Tyr
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Met	His	Glu	Lys	Gly	Leu	Gly	Ile	Lys	Gln	Asp	Ile	His	Leu	Ala	Lys
675					680					685					
Arg	Phe	Tyr	Asp	Met	Ala	Ala	Glu	Ala	Ser	Pro	Asp	Ala	Gln	Val	Pro
690					695					700					
Val	Phe	Leu	Ala	Leu	Cys	Lys	Leu	Gly	Val	Val	Tyr	Phe	Leu	Gln	Tyr
705					710					715					
Ile	Arg	Glu	Thr	Asn	Ile	Arg	Asp	Met	Phe	Thr	Gln	Leu	Asp	Met	Asp
725					730					735					
Gln	Leu	Leu	Gly	Pro	Glu	Trp	Asp	Leu	Tyr	Leu	Met	Thr	Ile	Ile	Ala
740					745					750					
Leu	Leu	Leu	Gly	Thr	Val	Ile	Ala	Tyr	Arg	Gln	Arg	Gln	His	Gln	Asp
755					760					765					
Met	Pro	Ala	Pro	Arg	Pro	Pro	Gly	Pro	Arg	Pro	Ala	Pro	Pro	Gln	Gln
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&lt;210&gt; 2031

&lt;211&gt; 662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2031

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120  
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cgcagcgcca tcgaacaggc ttccttgga cgctccaatc aattgaccga cgaattgctc  
240  
gccgcccagc tgctgggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc  
300  
aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc  
360



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 420  
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 480  
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 540  
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<210> 2032

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2032

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			20					25					30		
Ile	Thr	Val	Arg	Asp	Val	Ala	Leu	Asn	Pro	Val	Pro	His	Leu	Asp	Thr
		35					40					45			
His	Leu	Leu	Gly	Gly	Trp	Met	Lys	Pro	Ala	Glu	Gln	Arg	Ser	Ala	Ile
	50					55					60				
Glu	Gln	Ala	Ser	Leu	Asp	Arg	Ser	Asn	Gln	Leu	Thr	Asp	Glu	Leu	Leu
65					70					75				80	
Ala	Ala	Asp	Val	Leu	Val	Met	Ala	Ala	Pro	Met	Tyr	Asn	Phe	Ala	Ile
			85						90					95	
Pro	Ser	Thr	Leu	Lys	Ala	Trp	Leu	Asp	His	Val	Leu	Arg	Ala	Gly	Val
			100					105					110		
Thr	Phe	Lys	Tyr	Thr	Ala	Thr	Gly	Pro	Gln	Gly	Leu	Leu	His	Gly	Lys
		115					120						125		
Arg	Ala	Ile	Val	Leu	Thr	Ala	Arg	Gly	Gly	Ile	His	Thr	Gly	Ala	Ser
	130					135					140				
Ser	Asp	His	Gln	Glu	Pro	Tyr	Leu	Arg	Gln	Val	Met	Ala	Phe	Ile	Gly
145				150						155				160	
Ile	His	Asp	Val	Thr	Phe	Ile	His	Ala	Glu	Gly	Val	Asn	Leu	Ser	Gly
			165					170						175	
Asp	Phe	Gln	Glu	Lys	Gly	Leu	Asn	His	Ala	Lys	Ala	Leu	Leu	Ala	Gln
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Leu	Val	Ala													
			195												

<210> 2033

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2033

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 180  
 ccatttgctg ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt  
 240  
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc  
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<210> 2034

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2034

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			20					25				30			
Glu	Leu	Lys	Ser	Glu	Leu	Ala	Ser	Pro	Phe	Ala	Ala	Ile	Tyr	Asp	Thr
		35					40					45			
Lys	Ala	Lys	Asn	Lys	Val	Thr	Asp	Gln	Pro	Val	Gly	Thr	Gly	Pro	Tyr
		50				55					60				
Gln	Ile	Asp	Ser	Tyr	Lys	Arg	Ser	Gln	Lys	Ile	Val	Leu	Lys	Gln	Phe
65					70				75					80	
Lys	Asp	Tyr	Trp	Gln	Gly	Thr	Pro	Lys	Leu	Lys	Arg	Ile	Asn	Val	Thr
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Tyr	His	Glu	Asp	Gly	Asn	Xaa	Arg	Val	Asp						
			100					105							

<210> 2035

<211> 495

<212> DNA

<213> Homo sapiens

<400> 2035

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 120  
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 180  
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 240  
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 300  
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 360  
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 420

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 acttggggga acctt  
 495

<210> 2036  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2036  
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 20 25 30  
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His  
 35 40 45  
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly  
 50 55 60  
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu  
 65 70 75 80  
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser  
 85 90 95  
 Leu Tyr

<210> 2037  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2037  
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 ggaagagtga ggttgagtg cctttccgc gctcatcttc cgtccccact ccacgccag  
 120  
 caaatccaaa caccgcggcc tctggtggcc cgggcttcca tttccctgg aggggcaagg  
 180  
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 240  
 ggtcccgggg ggtccgagtg tgtgtcaggg gctggggcg gggatgggag cggcccctgg  
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 327

<210> 2038  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
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Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35                40                45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50                55                60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
      65                70                75                80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
                        85                90                95
His Glu

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&lt;210&gt; 2039

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2039

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60
cgcgatgtat tgccccgaaa acagcggctt gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttggca tacatgtcgg ccacgtcgt cagccagagt
300
aacgcgt
307

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&lt;210&gt; 2040

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2040

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Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
  1                5                10                15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
      20                25                30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35                40                45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
      50                55                60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
      65                70                75                80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
                        85                90

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&lt;210&gt; 2041

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2041

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 gccagcttcc tgccgttcgc cagacgcata gccgaggcgg ggggtgcgcaa ttcgctcgcc  
 120  
 cagctggtcg ccaagctgac cctgccccgc atgcccgaca tctaccaggg ctgcgagatg  
 180  
 tgggacctca gcctggtcga ccgggacaat cgccgccccg tcgactacga gacacgcgac  
 240  
 gcggccctgg ccggctgggt cgcgaccccc cgaggaggaac gcgccgcggc gctgcgcacc  
 300  
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 348

&lt;210&gt; 2042

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2042

Xaa	Arg	Arg	Cys	Arg	Asp	Ser	Pro	Ala	Met	Arg	Ser	Asn	Pro	Ala	Arg
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Gly	Ala	Phe	Leu	Ala	Ser	Phe	Leu	Pro	Phe	Ala	Arg	Arg	Ile	Ala	Glu
		20						25					30		
Ala	Gly	Val	Arg	Asn	Ser	Leu	Ala	Gln	Leu	Val	Ala	Lys	Leu	Thr	Leu
		35					40					45			
Pro	Gly	Met	Pro	Asp	Ile	Tyr	Gln	Gly	Cys	Glu	Met	Trp	Asp	Leu	Ser
		50				55					60				
Leu	Val	Asp	Arg	Asp	Asn	Arg	Arg	Pro	Val	Asp	Tyr	Glu	Thr	Arg	Asp
65					70					75				80	
Ala	Ala	Leu	Ala	Gly	Trp	Val	Ala	Thr	Pro	Pro	Glu	Glu	Arg	Ala	Ala
			85					90						95	
Ala	Leu	Arg	Thr	Leu	Leu	Thr	Asp	Trp	Arg	Ser	Gly	Ala	Val	Lys	Leu
		100						105						110	
Ala	Val	Thr	Arg												
		115													

&lt;210&gt; 2043

&lt;211&gt; 712

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2043

gatctgacgg tctcgactaa gcctgacat tccgaggtca ccgacgccga ccttgccgtc  
 60  
 gaagattcgg tgcgagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag  
 120  
 gaacgtgccg ataccgggga tggacccgc cggatgatca ttgatccgat cgacggcact  
 180  
 gcgaattttc tgctgggggt ccagtggtg gccacctca ttgccctcag cgctgaggac  
 240  
 cagattgtcg catctgtggt ctctgtcct gccctcaagc gacgtggtg ggcagcccgt  
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaatc ttgccgacgc attcttggtcc tactcttcgc tgcacggatg ggtcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggacccg agccttcggc  
 480  
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagtcc  
 600  
 accggtctcg atggcaaaga cggcccgtag tctgggaatg ctctggcgtc gaatggtttc  
 660  
 cttcatgacc aggccttagc catggtccag cctcaggagt gagcaccgat cg  
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5				10						15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
			20					25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly
		35					40					45			
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
		50				55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65					70				75					80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90					95		
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100					105					110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115					120					125			
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
		130				135					140				
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145					150					155				160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165					170					175	.	
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180						185					190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
		195					200					205			
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
		210				215					220				
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

<210> 2045

<211> 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2045

```

nnttgacac cggcgactat gccgccaccg cacggatcaa tcgcggaacc agggcagggg
60
atgcgcccga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttgga agaaaccggt caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgctcca ggccgttcaa ggccgatggc
240
gagatcgctg cgatgactgg cgacggtgtc aacgacgccc cctcgctcaa ggcggcccat
300
atcgggtgtg ccatggacaa acgcggcacc gacgtcgccg gcgaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcggtcc ggctcg
406

```

&lt;210&gt; 2046

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
1      5      10      15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
20     25     30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
35     40     45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
50     55     60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
65     70     75     80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
85     90     95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
100    105    110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
115    120    125
Ile Val Gln Ser Val Arg Leu
130    135

```

&lt;210&gt; 2047

&lt;211&gt; 796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2047

```

aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
60
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

```

tgctggcccg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt  
 180  
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca  
 240  
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtgta  
 300  
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggt gagtttagcc tcagtgttgg  
 360  
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat  
 420  
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtggtag  
 480  
 tggcttttagc ctttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac  
 540  
 agctggctcg gtggactgga ctgaccagct gggcttcagg aacttggaag tgtccagctg  
 600  
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc  
 660  
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaagtg gagggctctga  
 720  
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag  
 780  
 caaagatttg gctgag  
 796

&lt;210&gt; 2048

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35					40					45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
		50				55					60				
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65					70				75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85					90						95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100					105					110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115					120					125			
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
		130				135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150					155					160

&lt;210&gt; 2049

&lt;211&gt; 516



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgtcg  
 60  
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggt gattgaactg  
 120  
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca  
 180  
 gcctacggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgccattgt  
 240  
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc  
 300  
 gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tccctgctg  
 360  
 cgccacgcca tgttgcgtct gccgggcatt gcgctggcgc tggcggcctt gggttttttt  
 420  
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcatgcct  
 480  
 tatctcgaac gggcgccctg gggagtcctg gcaccg  
 516

&lt;210&gt; 2050

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
			35				40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55				60					
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
				85					90					95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
			115				120					125			
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130					135					140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165					170						

&lt;210&gt; 2051

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat  
 60  
 aatagtgatc gtctcggtaa gaatttatgg accgacgggtg aaatggggga gccagtaggt  
 120  
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat  
 180  
 tgggtagatg atgggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa  
 240  
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg  
 300  
 atgcgattct tcgaacgccca agaaattaaa gatgcgttgg catatttacg ttttaattaat  
 360  
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t  
 411

&lt;210&gt; 2052

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1			5					10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20					25					30			
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
	35					40						45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50					55					60				
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70						75				80	
Ser	Arg	Val	Ile	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg	
		85					90					95			
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
	100						105					110			
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
	115					120					125				
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130					135									

&lt;210&gt; 2053

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc  
 60  
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac  
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc  
 180  
 acacctgagg gtgccgaggg cccgactccg caaaccacgc accagctgaa ggcctgtgc  
 240  
 tccctggctg cagaggggtat gtggacagac acatttgagt tttgtga  
 287

<210> 2054  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 2054  
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys  
 1 5 10 15  
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr  
 20 25 30  
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly  
 35 40 45  
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys  
 50 55 60  
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys  
 65 70 75

<210> 2055  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 2055  
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt gggctactgat  
 60  
 tcccacacca ccattggaaa tggctctggc attctgggct ggggcgtcgg tggattgaa  
 120  
 gccgaggctg ctatgcttgg ccagcccatc tccatgetta tccccgtgt tgttggttt  
 180  
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact  
 240  
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg  
 298

<210> 2056  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2056  
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys  
 1 5 10 15  
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu  
 20 25 30  
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln  
 35 40 45  
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

```

      50              55              60
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
65              70              75              80
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
      85              90              95
Gly Gly Ser

```

<210> 2057  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2057
acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
60
gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
120
caaaatctag ttggaccaa caacgcccag tatggctggt atctagcctt tggatgatc
180
ttcatgggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt
240
ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaaa
300
agagaaacct tctcaagtta ccctgatgat gttactgtta ctcaattgac ccaaaaaggg
360
gacaaaaaac ttgattttac agtttgggaat agcttaacag aagatttact tgctaacgga
420
gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggt
480
atcctactaa aaggtagagt caaagataat ggcctccagt tcgcatccta tctaggaatt
540
aaaacggacg gaaaagttac tgttcatga
569

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<210> 2058  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2058
Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
1              5              10              15
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Ser Tyr Thr
      20              25              30
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
      35              40              45
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
      50              55              60
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
65              70              75              80
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
      85              90              95
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

```

	100		105		110										
Phe	Ala	Ser	Tyr	Leu	Gly	Ile	Lys	Thr	Asp	Gly	Lys	Val	Thr	Val	His
	115			120							125				

&lt;210&gt; 2059

&lt;211&gt; 644

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2059

gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc  
 60  
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc  
 120  
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gcctctcac aactgaacc  
 180  
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcaa  
 240  
 gctcgacaag aagaaccgca gaggggcgac ggcctggcca gggagcgac cttcagcgtt  
 300  
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag  
 360  
 tcggccgagg tccgccggtta cctctctcat ggcttcaca ggaacgcggt cacacaccac  
 420  
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc  
 480  
 gtagcgggct gctgaggtga caaagatcca cagatccgcg gcctggagca actgagccgc  
 540  
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc  
 600  
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt  
 644

&lt;210&gt; 2060

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2060

Met	Arg	Glu	Val	Pro	Ala	Asp	Leu	Gly	Arg	Leu	Met	Thr	Glu	Arg	Gly
1				5				10						15	
Leu	Ala	Asp	Ser	Pro	Leu	Phe	Ala	Val	Pro	Glu	Thr	Lys	Thr	Asn	Ala
		20					25						30		
Glu	Gly	Ala	Leu	Pro	Asp	Gln	Ala	Val	Ala	Pro	Leu	Arg	Phe	Phe	Leu
		35				40					45				
Ser	Ser	Leu	Ala	Gln	Asn	Gln	Gln	Lys	Arg	Arg	Glu	Val	Ile	Ala	Ser
	50				55					60					
Thr	Leu	Ser	Gly	Ala	Ile	Gly	Ser	Val	Cys	Glu	Arg	Ala	Ser	Tyr	Val
65				70				75						80	
Ala	Ala	Gly	Leu	Glu	Ala	Gln	Ala	Val	Ala	Ser	Arg	Leu	Tyr	Glu	
			85				90					95			
Asp	Ala	Gln	Ser	Ile	Met	Ala	Glu	Ser	Tyr	Arg	Ser	Ile	Ala	Ala	Gln
		100				105						110			
Ser	Ala	Asp	Gly	Thr	Leu	Leu	Arg	Gly	Glu	Val	Leu	Ala	Arg	Trp	His

115 120 125

Glu Phe  
130

<210> 2061  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 2061  
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag  
60  
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag  
120  
acgccgccac ctggatgcac tgagggtgtgc acagccacgt ggagatgatg ctggggggctc  
180  
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc  
240  
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt  
300  
tgccacacgc accaggtcct gactgggagt ccggcccccga gggcctgtgg atggctggcc  
360  
tggggcccagc ctccgcccc aaggggtgctg gcacctggca tgtgcccga acgttggggcc  
420  
ggctgggtggg aaggtgtgtg tcagggtggcg gagcctcggt gccaggatct cactcacgcg  
480  
t  
481

<210> 2062  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2062  
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Trp Ala Gln Ala Ser  
1 5 10 15  
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val  
20 25 30  
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro  
35 40 45  
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg  
50 55 60  
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu  
65 70 75 80  
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe  
85 90 95  
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His  
100 105 110  
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala  
115 120 125  
Leu Leu Thr Arg Leu  
130

&lt;210&gt; 2063

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2063

```

gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc
60
gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc
120
atcgagcgccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac
180
tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgccgcg gcaccacgtg
240
gtggaagaaa ccaaccggac cctagatgcc gctaccgcg tgatctcttc cgatctagat
300
acattccggc ggcttatgcg cgagagccac atctccctgc gcgaccttta tgaggtcacc
360
actccggagc tcgactccgt tttaccgcg gccggcgagc tgggcgctcg catgannnn
419

```

&lt;210&gt; 2064

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2064

```

Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
1      5      10      15
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
20     25     30
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
35     40     45
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
50     55     60
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Val His His Val
65     70     75     80
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
85     90     95
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
100    105    110
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
115    120    125
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
130    135

```

&lt;210&gt; 2065

&lt;211&gt; 598

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2065

```

gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccgg cgcaaagggtg
60

```

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc  
 120  
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg  
 180  
 cttctcgaac tcggtggtga ggatgccaaag atcacctacc ttaagccggt ccccgaaacag  
 240  
 cgcatgaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg  
 300  
 ctgcacaccg acactcccgg cctcaatgac ctgcgatccc gagccaagac catccatccg  
 360  
 atcgctcgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg  
 420  
 gcccgccaag aggatctggc tgccctcggtc ctgcaggctg tcgccactca gtgcattggc  
 480  
 ggcttgccat gtggtcgccc gattcgaggt aaggatcatct tccttggcgg tccgcttcac  
 540  
 tttatgcaa gtttgcgaga cgctttctcg cgcgtctctg acggttaagg tgacgcgt  
 598

&lt;210&gt; 2066

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1				5					10					15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
		35				40						45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
	50					55					60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
			85					90						95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
		115					120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
	130					135					140				
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
			165					170						175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
		180						185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
		195													

&lt;210&gt; 2067

&lt;211&gt; 366



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2067

ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac  
 60  
 aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg  
 120  
 tacttcgggt tgcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg  
 180  
 ccgatcggtt acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc  
 240  
 gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc  
 300  
 gtcaacttcc acgccttggt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg  
 360  
 accggt  
 366

&lt;210&gt; 2068

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1				5					10					15	
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20					25					30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
		35				40					45				
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50				55					60					
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65				70					75					80	
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
			85					90					95		
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
		100						105					110		
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
		115					120								

&lt;210&gt; 2069

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2069

cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccttgggatg  
 60  
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt  
 120  
 gcctttggct ggaattccac cccagccttc ttgcctcaag aacgcccttc ccccttcaga  
 180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa  
 240  
 agaccctctc ctcgatcaag ctttgggtcaa gctcctaccc  
 280

<210> 2070  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2070  
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly  
 1 5 10 15  
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro  
 20 25 30  
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys  
 35 40 45  
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val  
 50 55 60  
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu  
 65 70 75 80  
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro  
 85 90

<210> 2071  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2071  
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgct atacagcacg ttaacatagc  
 60  
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat  
 120  
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac  
 180  
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag  
 240  
 gggagggtgt caggggatga gctgctctg aggaagagggc agagatcaag cttcactcag  
 300  
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac  
 360  
 aatatgttca tacataaaga ctctaccctc aggtgatca  
 399

<210> 2072  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2072  
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu  
 1 5 10 15  
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp

```

      20      25      30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
      35      40      45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
      50      55      60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
      65      70      75      80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
      85      90      95
Ser Thr Leu Arg
      100

```

<210> 2073  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggctgcct gcgttccttg gctcgtggcc
60
ccttcctcca ccttcaagcc agcagcggag gcctgagtc tttcatgcc atctctctgt
120
tctctctcct gcctcctcct ccacactgaa ggaccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggtcg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

```

<210> 2074  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1      5      10      15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
      20      25      30
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
      35      40      45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
      50      55      60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
      65      70      75      80
Gly Thr Glu Val Asp
      85

```

<210> 2075  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 2075  
 ntggccagggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa  
 60  
 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt  
 120  
 atcctgagcg ctctgcca actgggcctg ctgaggaaga tccgcctctg gcacgacagc  
 180  
 cgtgggcctt cccaggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga  
 240  
 cagggtggt tcttcctgc ccagtgtgg ctgtctgccg gcaggcatga tggtcgctg  
 300  
 gagcgggagc tcacctgtct gcaaggggga ctcggttct ggaagctttt ctattgcaag  
 360  
 ttcacagagt acctggagga tttccatgtc tggtgtcgg tgtacagcag gccctcctcc  
 420  
 agccgctacc tgcacagcc gcgccccacc gtgtccttct ccctgctgtg cgtctacgcg  
 480  
 t  
 481

<210> 2076  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 2076  
 Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn  
 1 5 10 15  
 Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe  
 20 25 30  
 Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu  
 35 40 45  
 Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser  
 50 55 60  
 Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly  
 65 70 75 80  
 Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His  
 85 90 95  
 Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly  
 100 105 110  
 Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe  
 115 120 125  
 His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu  
 130 135 140  
 His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala  
 145 150 155 160

<210> 2077  
 <211> 1410  
 <212> DNA  
 <213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatcca aatgatgtga atactttcag aaaccaatgg  
60  
caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt ttttttttgt  
120  
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct  
180  
ctttggtcta cagtgagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg  
240  
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag  
300  
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct  
360  
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag  
420  
ggcagcatgg gaaaggctca gactgcaggt tcatcccga ggatggtaag gacacgtgct  
480  
cctccctcgc aagagcaggg ttgtgcacag ccgggcacag ggccagccag ggcggccctt  
540  
gcggctgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtgga  
600  
tctgctggtc cagcacagcc actcgcagct tgaggggcgc cagggtctgc agctcctggg  
660  
tgctggagta gacaagcagc tgggnnggct ccatgcaggg tccgctctac cccacagga  
720  
cggcgaggct ccgggggggc tnnccccaca gacatggtct tggtaggtgt tccgccaccg  
780  
ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agccctcca  
840  
gcgtgagcag gcagcggtag tcctgcatcc agtccatggg ggctgctgag agctcctccc  
900  
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg cccgcctcc gcctccacct  
960  
ccacagcact gagcctgggc tggggccgc ctgaagctgt ctgcatgttc tggaggaaact  
1020  
gggttttggc agcggcggca tccgtggaat cactggtctg tgtggaactg agctgggccc  
1080  
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcagggtgc  
1140  
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgct  
1200  
ggtccctgag gcccgcccca ggctggggg ttcgggctcc catcccaaca cgggtcccat  
1260  
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga  
1320  
ggcccttggg ggggtctctg tctgaagcat ggccaccagc ttggcctggg gaatgcgggtg  
1380  
gggcggaggc tgtcgtgcc gaagaggtga  
1410

&lt;210&gt; 2078

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser  
 1 5 10 15  
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser  
 20 25 30  
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser  
 35 40 45  
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys  
 50 55 60  
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln  
 65 70 75 80  
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly  
 85 90 95  
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala  
 100 105

&lt;210&gt; 2079

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag  
 60  
 gtactggcgg tcaaataccta caaacgcatt accttcaacg agatcactct caagcgcgtt  
 120  
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc  
 180  
 cggcgtgtgc ttgaccgctt ggtgggggtac ctggtgaccc aagagttgcg gcgcctgatg  
 240  
 ggcaaacctta cttccgctgg ccgcggttcaa tcacccgccg tgtttcttgt ggtcttgccg  
 300  
 gaacgcgaga tccgcaactt tcaggtgatc aatcactttg gcgtgctctt gttctttgccc  
 360  
 gatgtaagtc ggggcaccac ttggtatgcc gaggggcaac cgggtaccgga tttcgcaagc  
 420  
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat  
 480  
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc  
 540  
 tcatccactc ttcaacaggc cgcca  
 565

&lt;210&gt; 2080

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp  
 1 5 10 15  
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe  
 20 25 30  
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

      35              40              45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50              55              60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65              70              75              80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
      85              90              95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
      100              105              110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
      115              120              125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
      130              135              140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
  145              150              155              160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
      165              170              175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
      180              185

```

&lt;210&gt; 2081

&lt;211&gt; 319

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2081

```

aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
  60
aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
  120
aatcaacaa tcgctacaca acttgctcag aggctcaatt tgcctaattgt tttgcagacg
  180
gacatgggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
  240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
  300
gttgtacgca agggtttgg
  319

```

&lt;210&gt; 2082

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2082

```

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1              5              10              15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
      20              25              30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
      35              40              45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
      50              55              60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

65                      70                      75                      80  
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys  
                              85                      90                      95  
Arg Glu Cys Arg Val Val Arg Lys Gly Leu  
                              100                      105

```
<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens
```

```

<400> 2083
nngcctgatt gcgacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
120
caccagccgg tcatttgtgc tgttgtccgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaagtctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat
360
gaaaaggcag gagatgaagg tn
382

```

```
<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens
```

```

<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
 1                    5                    10                    15
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
                20                25                30
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
            35            40            45
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
        50        55        60
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
65                70                75                80
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
            85            90            95
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
        100        105        110
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
            115            120            125

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<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 2085

nnggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctaccgcac  
 60  
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa  
 120  
 atccggcgtc gcgtggagga agccgcgaa ctctcgacc tcaccgacta tctggaccgc  
 180  
 aaacccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgctattgtt  
 240  
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt  
 300  
 gtccgcaccc gcgcccagat tgcggaactg cagcgcgcgc tgggcaccac caccgtttat  
 360  
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc  
 420  
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgc taacgcgt  
 478

&lt;210&gt; 2086

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala
1			5						10					15	
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys
			20					25					30		
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala
			35				40					45			
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala
			50			55				60					
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val
65				70				75						80	
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp
			85					90					95		
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg
			100					105					110		
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala
			115			120					125				
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln
			130			135					140				
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	
145				150					155						

&lt;210&gt; 2087

&lt;211&gt; 731

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2087

gataattctc tacacggcat gagctgggga cgtaccccc ttgccaacgt cacctcacgg  
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt  
 120  
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct  
 180  
 ggtcggatca atcgagcaa tcacccctc cccagggcag aagctaactc caataggcca  
 240  
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc  
 300  
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttggttaag  
 360  
 gctggattta gttccgccga cgcggtggct ctagcgccgc gtattgccag agaaatggca  
 420  
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg  
 480  
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa  
 540  
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg  
 600  
 gtggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg  
 660  
 ccattgccgc aactgcgctc aatcccgcgc tcgggccgat cgcaaagact gagggcatta  
 720  
 aggctgagat c  
 731

&lt;210&gt; 2088

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5				10					15		
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
			20				25						30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
		35					40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
		50				55					60				
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65				70					75					80	
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
			85					90						95	
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
			100					105							

&lt;210&gt; 2089

&lt;211&gt; 315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2089

accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag  
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attccccgtca gcccatcatc  
 120  
 ttcgacaccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc  
 180  
 gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggctgggaa  
 240  
 tcgttggtgg cgtctctcac gagtcttgct gactctatgg ggatccgtct gaccggcatt  
 300  
 accgattcga tcccg  
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1				5					10					15	
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25					30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
		35				40					45				
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50				55					60					
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75					80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85					90					95		
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
			100					105							

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

actcttgacc attgtctctg tctctgcgtt tttctctctg tctctctgtg tctctgtctc  
 60  
 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcacc tctctctgtg tctctgtgng  
 120  
 agtctctgtc tcttttctct ctgtctctct ctgtgtctct gccattttg gtctctgctt  
 180  
 tctttctct gtgtgtctct ccattttctg ctctcttct ctgtctctct ccattttctg  
 240  
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt  
 300  
 ccattttctg cccttcacgc gt  
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

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gccggcgatca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctaccgcgc agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagt
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttctctggc gttggcta
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttgcgaacat acgc
324

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<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1             5             10             15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
      35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```

85 90 95  
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg  
 100 105

<210> 2095  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 2095  
 cccgtcacag accaggaaga agcagacaat atgatcgctt ctttcgacac ttatgttcgc  
 60  
 accctgcccc ccgcccga aa tcttctgctt aaacaattcc atattgtgga tgttgcccgg  
 120  
 cgcgtgggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc  
 180  
 aatgatgaac ctcttgtgct gcaagtga aa gaagccctcc ccagtgtcct caccacccat  
 240  
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc  
 300  
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggggc gtgccagcag  
 360  
 attctgcagg cccactcgga tccgctgctg ggggtggacgc gt  
 402

<210> 2096  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 2096  
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp  
 1 5 10 15  
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln  
 20 25 30  
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val  
 35 40 45  
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro  
 50 55 60  
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His  
 65 70 75 80  
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser  
 85 90 95  
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly  
 100 105 110  
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro  
 115 120 125  
 Leu Leu Gly Trp Thr Arg  
 130

<210> 2097  
 <211> 641  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2097

ncgtttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc ccctcccag  
 60  
 gcggagcagg cgtggccgca gagcagcggg gaggaggagc tgcagctcca gctggccctg  
 120  
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctgggggt gtctgtccgc  
 180  
 caccgcctc cacgcctcac ttcaggctcc ctcccagcca ggcgtgggccc tggccctcac  
 240  
 tgtcgtgct ccacatgctg tcaactcgtct cctccccagt cctgcctcat cctcacnccg  
 300  
 ccgtccctct gcgtgtcact ctctgcctgt cctcactggg tcagggaccc ccagcctctc  
 360  
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc ccctcccgtc  
 420  
 atgccccctca cactctctct cccccagccc ccgtcctgcg gccccgagga cgacgcccag  
 480  
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg  
 540  
 tccctgcccc tgccaggggc tcccctcaga ccagccccgt cgccccttcc taagtcaccc  
 600  
 cccaccatcc tgctggggccc gaagcccaca ggctcacgcg t  
 641

&lt;210&gt; 2098

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2098

Xaa	Phe	Leu	Thr	Arg	Pro	Pro	Ala	Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly
1				5				10					15		
Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35					40					45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
		50				55					60				
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65					70				75					80	
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
			85						90					95	
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
			100					105					110		
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
		115					120					125			
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
		130					135					140			
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145					150					155				160	
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
			165						170					175	
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

180 185 190  
 Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys  
 195 200 205  
 Pro Thr Gly Ser Arg  
 210

<210> 2099  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 2099  
 acgcgtgtgc cctgtcccct gccagacatg gacagcacct gcccacaggg gtgctcagtg  
 60  
 gaggcagtgc ccagggtgc tgtgcccattg cgtgtaccct gtcctctgcc agacgcggac  
 120  
 agcacctgcc cacgggggtgc tcagtggagg cagtgtccag ggctgctgtg cccacgtgtg  
 180  
 tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg  
 240  
 cagtattctg ttcaggtgag ctcagaggtg gcaggtgcct ggctgcggcc ctgcctcact  
 300  
 ccgacagcct ctgcctccag tccactggct catcccatat ggctga  
 347

<210> 2100  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2100  
 Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg  
 1 5 10 15  
 Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser  
 20 25 30  
 Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys  
 35 40 45  
 Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp  
 50 55 60  
 Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu  
 65 70 75 80  
 Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala  
 85 90 95  
 Ser Ser Pro Leu Ala His Pro Thr Trp Pro  
 100 105

<210> 2101  
 <211> 549  
 <212> DNA  
 <213> Homo sapiens

<400> 2101  
 ctctctccga ccgcgttgac ggctccagccg gtccgcacgc cgtcatcgga atcggcatca  
 60

acgttttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg  
 120  
 ggttgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat  
 180  
 taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggcccgc tgtgacacca  
 240  
 ttggtactcc ggtccgtctg accttcgacc cagaaatcgt ggggtggtggt gagggggcca  
 300  
 ttgagggcat cgggtgctgac gttgacgttg atggcgctat cgtggtggaa acttctgacg  
 360  
 ggcgtcgcag tttcaacgct gctgacgttc atcatttgcg aaccaggtga gttccgctac  
 420  
 ggcgtcctga gcgttccac catctagact gctgactatg acgaccaca ttttggccct  
 480  
 tgggtggtggc ggtttctcga tgtcgaaccg cggtgagcct accgctctcg accgtcacat  
 540  
 ccctgacct  
 549

<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
1				5					10					15	
Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
		35				40						45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50					55					60				
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65				70						75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90					95		
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
			100					105					110		

Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

nnacgcgtga cttatacacc gggacgcaat gcgacggcaa cggcagagca cactatcgcc  
 60  
 atgattatgg cggcagtgcg acagatcccc gccaccatg agttactcgc ttcagggggt  
 120  
 tgggaggggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc  
 180



ggtatcgctcg gatgctggagc ggtcgggtgc cgggttgctg ctgtgatggc ggccatgggt  
 240  
 gcgacctgctc gtgtcttcga cccgtggggc actcctgatt cttttccagc tggcgtgatg  
 300  
 gcatgtgatg atctcgatga ggttctgagg ctcagccgca tcctcactct ccacgctcgt  
 360  
 gccaacgagg acaaccgtca catgattggc gttgaacaat tagctgagat gcctgatggc  
 420  
 tccgtctctcg tcaactgtgc ccgtggctcg ctggctcgac  
 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
1				5					10					15	
His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
				85					90					95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105				110			
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145					150										

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

nnggaaaagc tccgtctagg gggccccag catgcctgga agtcttgctc atctgcctag  
 60  
 agctgaagct ttgggtctgt cctggctttg ccaggcagcc agttttattt cctttgttca  
 120  
 cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa  
 180  
 aagtttgggc aaaacattaa cctgacaaag cttgattccg gaaaaaatc cctcaagagc  
 240  
 gcaaggccag cttagccaac tggcagctga gtggaaaggc tcagtcctct cgggcagctc  
 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt  
360  
cttactttgc ttcttgctgt taccagttgg cctgacctta ggaaatgtta tttaatctct  
420  
ctccagttgt tccccctgga gaaagccctg tcagcctgag gatccaagac gcgtacgtaa  
480  
agtgtctgat ttcagccagt gtcccttcct gtcccttcct ggggtgtgtg tcggttgccc  
540  
tgagcgaccg gccatgggac tctgtcgtga taaccaagct tcaggggtgtg ggaagaggac  
600  
agtcagtgtc tccttggggc atcactcggg aacatcatgg gcataaacia aagtactcag  
660  
tcttcaaggt cataaagtaa ccagagtgtg ttccttttgt tttcagatct cttacctcag  
720  
ctagaagctc cgagttctct tactcccagc agtgaactca gcagcccagg ccaaagttag  
780  
ctcactaaca tggatcttgc tgcactcttc tctgacacac ctgccaatgc tagtggttct  
840  
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<212> PRT

<213> Homo sapiens

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Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
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Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
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Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
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Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
        50                    55                    60
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Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro
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240
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Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
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Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
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<212> PRT

<213> Homo sapiens

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Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
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Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
		195				200						205			
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
	210					215					220				
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

```

225          230          235          240
Ile Ile Ser Leu Tyr Ala Ile Ile Ser Ile Ala Gly Thr Ile Phe Val
.          245          250          255
Thr Val Gly Ser Leu Val Leu Leu Gly Trp Glu Leu Asn Val Leu Glu
          260          265          270
Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val
          275          280          285
His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly
          290          295          300
Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala
305          310          315          320
Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val
          325          330          335
Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile
          340          345          350
Ser Trp Ala Phe Ala Thr Phe Phe Phe Gln Cys Met Cys Arg Cys Leu
          355          360          365
Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln
          370          375          380
Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly
385          390          395          400
Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly
          405          410          415
Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala
          420          425          430
Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Glu Thr His
          435          440          445
Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro
          450          455          460
Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp
465          470          475          480
Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys
          485          490          495
His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys
          500          505          510
His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu
          515          520          525
Cys His Gln Cys Ser Pro Thr Thr Ser Ser Phe Val Gln Ile Gln Asn
          530          535          540
Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val
545          550          555          560
His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val
          565          570          575
Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His
          580          585          590
Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val
          595          600          605
His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu
          610          615          620
Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys
625          630          635          640
Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val
          645          650          655
Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys

```

```

        660                665                670
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
        675                680                685
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
        690                695                700
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
705                710                715                720
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
        725                730                735
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
        740                745                750
Leu Leu Ile Lys Thr Leu
        755

```

&lt;210&gt; 2115

&lt;211&gt; 461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2115

```

acgcgtctct ggctgggag cgggctcccc cgacacgcca cttccctgc cagatggtgc
60
ttctgggtat tccagaatct ggaatggggg atgcctatcc cctcctgag cccacctgct
120
ggtcttgggt ccttggagcc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagcccgct cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtggtea tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccggtggg cagctggggc ggggtggacct ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g
461

```

&lt;210&gt; 2116

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2116

```

Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
1          5          10          15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
20          25          30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
35          40          45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
50          55          60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
65          70          75          80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

```

```

      85              90              95
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
      100              105              110
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
      115              120              125
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
      130              135              140
Thr Arg
145

```

&lt;210&gt; 2117

&lt;211&gt; 360

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2117

```

nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgagga tgaacaatc
60
cgcgccagcg ttaagacctt ctgcgggct gtcaccgccg atctggagaa gtgtggaccg
120
atcaggtgac actcgcggtg gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
acccaagagg ctttcgataa gtcacccag gagctggagt acctcaaagg cgaaggccgc
240
accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgaccttctc tgagaacggc
300
ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
360

```

&lt;210&gt; 2118

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2118

```

Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
  1              5              10              15
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
      20              25              30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
      35              40              45
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
      50              55              60
Arg Ile Arg Gln Leu Glu
65              70

```

&lt;210&gt; 2119

&lt;211&gt; 465

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2119

```

naccgctgaa gggcgctgt cgccctctca ctggcgagc ctgcactgcc gctgccgcct
60

```

cgccccgccc ttgccttgge gttgtctctg gcactgtggc ggactgacca cggccccgggc  
 120  
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct gttgttactc  
 180  
 actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt  
 240  
 acaacaaaat gggtttccac tccattgttg ttagaagcca gtgagttttt agcagaagac  
 300  
 agtcaagaga aattttggaa tttttagaaa gccagtcaaa atattggatc atcagatcat  
 360  
 gacggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca  
 420  
 cccctccagc agaatttggt taaattttgt ctgtcccttc acgcg  
 465

<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

Met	Gly	Cys	Lys	Gly	Asp	Ala	Ser	Gly	Val	Cys	Tyr	Lys	Met	Gly	Val
1			5					10					15		
Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25				30			
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35				40					45				
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
	50				55					60					
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65				70					75					80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90						95	
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
		100						105					110		
Leu	His	Ala													
		115													

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca  
 60  
 tgtggctctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt  
 120  
 ggaggttctt ttgttataaa atacaacaag acaaaactgtc agttttatgt agataatctc  
 180  
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtg cgagggagat  
 240  
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctgggtg  
 300

tttctgatta ttgtgacatc aatagccttg cttggt  
336

<210> 2122

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2122

Pro	Asp	Lys	Val	Asn	Gly	Met	Lys	Thr	Ser	Arg	Pro	Thr	Asp	Asn	Ser
1				5					10					15	
Ile	Asn	Val	Thr	Cys	Gly	Pro	Pro	Tyr	Glu	Thr	Asn	Gly	Pro	Lys	Thr
		20						25				30			
Phe	Tyr	Ile	Leu	Val	Val	Arg	Ser	Gly	Gly	Ser	Phe	Val	Thr	Lys	Tyr
		35					40					45			
Asn	Lys	Thr	Asn	Cys	Gln	Phe	Tyr	Val	Asp	Asn	Leu	Tyr	Tyr	Ser	Thr
	50					55					60				
Asp	Tyr	Glu	Phe	Leu	Val	Ser	Phe	His	Asn	Gly	Val	Tyr	Glu	Gly	Asp
65					70					75				80	
Ser	Val	Ile	Arg	Asn	Glu	Ser	Thr	Asn	Phe	Asn	Ala	Lys	Ala	Leu	Ile
			85						90					95	
Ile	Phe	Leu	Val	Phe	Leu	Ile	Ile	Val	Thr	Ser	Ile	Ala	Leu	Leu	Val
			100					105					110		

<210> 2123

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2123

aactgggccc agttcggcaa cctgcacccg ttcgccccgg ccgagcaaag cgctgggttat  
60  
cagcaactga ccgacgaact ggaagcgtat ctctgcgccg ccacagggtta tgacgcgatc  
120  
tccctgcagc cgaacgctgg ctcccagggc gagtacgccg gtctgctggc gatccgcgct  
180  
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccac  
240  
ggcaccaacc cggcaaccgc caacatggcc ggcatgcgcg tggtcgtgac cgcttgcgac  
300  
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgccaacac  
360  
ctcggggcgc tgatgatcac ctaccgctcg acccacggcg tggtcgaaga aggcacccgc  
420  
gagatc  
426

<210> 2124

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2124

Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

```

      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

```

&lt;210&gt; 2125

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2125

```

ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggtt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaa agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

```

&lt;210&gt; 2126

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2126

```

Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

```

<210> 2127  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<400> 2127  
 atggcagcca agatgcttgc attgttcgct ctctagctc tttgtgcaag cgccactagt  
 60  
 gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc  
 120  
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg  
 180  
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg  
 240  
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg  
 300  
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg  
 360  
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc  
 420  
 ttacagcaac cctttgttgg tgctgcattc taga  
 454

<210> 2128  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 2128  
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala  
 1 5 10 15  
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met  
 20 25 30  
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln  
 35 40 45  
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu  
 50 55 60  
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met  
 65 70 75 80  
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro  
 85 90 95  
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His  
 100 105 110  
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met  
 115 120 125  
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro  
 130 135 140  
 Phe Val Gly Ala Ala Phe  
 145 150

<210> 2129  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 2129

acgcgtgact tggatgaacaa acccatatcc atcaccacct tcggtgttga tacggaaata  
 60  
 ctcacgcctt ttgacaagcg gcgtgatgcg aacggcggtg acgggggtgt gcgcatcggg  
 120  
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg  
 180  
 gtccatgatg aacggcctaa tacggtcctt cgtatctggg gcggcgggcc agacgagaat  
 240  
 cccctcaagg tcttggctcg ccgtcttgc cggacgggtt cggtaggagtt tcgcggtgcc  
 300  
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc  
 354

&lt;210&gt; 2130

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
1				5					10					15	
Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
		20						25					30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
		35				40						45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50				55				60						
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65				70				75					80		
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85					90					95		
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
			100					105					110		
Leu	Asp	Ile	Phe	Ala	Ala										
															115

&lt;210&gt; 2131

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2131

gcacgcggc cattgggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag  
 60  
 ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac  
 120  
 ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa  
 180  
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagtga tcagattgac  
 240  
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt  
 300

cctgctcaag aagaagttac gcgt  
324

<210> 2132  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2132  
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu  
1 5 10 15  
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly  
20 25 30  
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala  
35 40 45  
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp  
50 55 60  
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp  
65 70 75 80  
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile  
85 90 95  
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg  
100 105

<210> 2133  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2133  
ggtacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta  
60  
gtggctgtct ttagaggacc cggcgaactt ttcctgcttt ttcccacttg ctccatcaca  
120  
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac  
180  
accagattac atcgctgtgg atccaaccct gcattttcct gccctcctt tactgcgagt  
240  
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt  
292

<210> 2134  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2134  
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu  
1 5 10 15  
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr  
20 25 30  
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His  
35 40 45  
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

```

      50              55              60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
65              70              75              80
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
      85              90

```

<210> 2135  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2135
acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc
60
actccgagcg tcgaccaaatt cgagatgcat ccttcgttca accaggcgac cttccgcgca
120
gagctggccg agcgcggcat taaccggag gcttgaggcc cgctgggcca gtcgaaggac
180
ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg
240
gtcattcgct ggcacctgca gatcggaac gtggtattcc ccaagtcggt gacaccatca
300
cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
360
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
420
ttctgcaaca ataaccggt
439

```

<210> 2136  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2136
Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
1      5      10      15
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
      20      25      30
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
      35      40      45
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
50      55      60
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
65      70      75      80
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
      85      90      95
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
      100      105      110
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
      115      120      125
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
130      135

```

<210> 2137  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 2137  
 nncctttgcc ttggctgata ccctcaccac ctgggaacat cccccagaca ccctcttaac  
 60  
 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg  
 120  
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc  
 180  
 tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggccctcgta  
 240  
 ctggtggctc agtatgggga gcagcgggccc tgggacctag ccctccatac ctgggagcag  
 300  
 atggggctga ggtcactgtg cgcccaagcc  
 330

<210> 2138  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 2138  
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu  
 1 5 10 15  
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala  
 20 25 30  
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr  
 35 40 45  
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln  
 50 55 60  
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg  
 65 70 75 80  
 Ser Leu Cys Ala Gln Ala  
 85

<210> 2139  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<400> 2139  
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 60  
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 120  
 gccgcccgtg ccccgaacga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc  
 180  
 gagctggctg ggacccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc  
 240  
 ggtcagcgc tggatgatggg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac  
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc  
 360  
 acggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgacccg  
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 433

<210> 2140

<211> 144

<212> PRT

<213> Homo sapiens

<400> 2140

Glu	Gln	Leu	Ser	Ala	Gln	Asn	Thr	Gly	Ile	Asn	Ser	Asn	Leu	Ser	Asp
1				5				10					15		
Met	Ala	Gly	Gln	Val	Asn	Lys	Leu	Ala	Ser	Thr	Ile	Ala	Gln	Tyr	Asn
			20					25					30		
Asp	Gln	Ile	Ser	Lys	Val	Thr	Thr	Ala	Ala	Gly	Ala	Pro	Asn	Asp	Leu
		35					40					45			
Leu	Asp	Gln	Arg	Ser	Glu	Ala	Val	Arg	Gln	Leu	Ser	Glu	Leu	Val	Gly
	50					55					60				
Thr	Gln	Val	Val	Gln	Arg	Gly	Ser	Ser	Tyr	Asp	Val	Tyr	Ile	Gly	Ser
65					70					75				80	
Gly	Gln	Arg	Leu	Val	Met	Gly	Asn	Ser	Thr	Asn	Thr	Leu	Ser	Ala	Val
			85					90						95	
Pro	Ser	Lys	Asp	Asp	Pro	Ser	Gln	Ser	Ala	Leu	Gln	Leu	Asp	Arg	Gly
			100					105					110		
Thr	Ser	Thr	Val	Asp	Ile	Thr	Ser	Thr	Val	Thr	Gly	Gly	Glu	Ile	Gly
			115				120					125			
Gly	Leu	Leu	Arg	Tyr	Arg	Ser	Asp	Val	Leu	Asp	Pro	Ser	Ile	Asn	Ala
	130						135					140			

<210> 2141

<211> 426

<212> DNA

<213> Homo sapiens

<400> 2141

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 120  
 ggtgacccaa ttgcttgatc tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa  
 180  
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa  
 240  
 gcggttggtc tggatactaa agtggtcgac ctttgtttca aaggcggtgc aagtcgtatc  
 300  
 aaaggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgcaa taatgcttgg  
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 420  
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 426

<210> 2142  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2142  
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe  
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 20 25 30  
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val  
 35 40 45  
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys  
 50 55 60  
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu  
 65 70 75 80  
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val  
 85 90 95  
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln  
 100 105 110  
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln  
 115 120 125  
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala  
 130 135 140

<210> 2143  
 <211> 1008  
 <212> DNA  
 <213> Homo sapiens

<400> 2143  
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 120  
 cttctcctgc ctactgctg cgctgatgat gcgcaggcgc ccgttgctga taacctcggg  
 180  
 acggctcctca gccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg  
 240  
 acgctcaaga gcacatatga gtacctcggg ctcacgacg gtcacgatct acccgacgac  
 300  
 gatggctacg ctcacgatca tctggtcgcg gctttgcgcc cgtatttggt gaatgggtgga  
 360  
 gacagtcggc aggcccacgt caccctaactc atggcggcgt catccctgaa aacctcaac  
 420  
 gcgttgtccg acaaggagag atcagaggtc gacaaacgta ccgcctgcc gaaggggtgc  
 480  
 atcacgagaa agacggtgat gacggatctg cccatcgcca cgatgaggcg ggagatcggc  
 540  
 ctgtccaacg acgggttggt cctcacaccg tggaaggcca agacgacttc ttccgaggag  
 600  
 gctcgggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc  
 660

gagaaatggg ggtgggagtc gatctcggac gggatatttc gccatctcga gacctacagt  
 720  
 ggcccagagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct  
 780  
 cgttcccagt tgcaacgcat cggcgacagt ctgcgggatg cgccatatcc gaggaaggac  
 840  
 cttggtccgg cgctcattcg caatggaaaag cgggtcaagg acaagtgcag tatcgaatcg  
 900  
 gcgtacctgt tgaggtattc cgggaattgg gcgtggtgac atgacggttt cttggcaagg  
 960  
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 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
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His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
		20						25					30		
Ala	Ile	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala	
		35				40					45				
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
		50				55					60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75				80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90					95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115				120						125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130				135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155				160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165					170					175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195				200						205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
		210				215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225				230						235				240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
				245					250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
			260					265					270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

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<210> 2145
<211> 389
<212> DNA
<213> Homo sapiens
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<210> 2146
<211> 109
<212> PRT
<213> Homo sapiens
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<210> 2147
<211> 235
<212> DNA
<213> Homo sapiens
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1598



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 acttgctcgg tcacctggaa tgacttccac tgtacctgcc ctgccaattt cacggggcct  
 120  
 acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg  
 180  
 gcggaggcca cgttccgcga gggccccccc gccgcgttca gcgggcacaa cgcgt  
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1				5				10					15		
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
		20						25				30			
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40				45				
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50				55					60					
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70					75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

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 60  
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 120  
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc  
 180  
 ctggcttggt gtgctgtgtc cagcaaaacta caggggtgcc gctggtagtt atggtgaaac  
 240  
 cagacacttt tcttatccac gagattaaga ctcttctctg taaagcgaag atccaagaca  
 300  
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt  
 360  
 gtgaggatgg cagcctgcgc atttacctgg ccaacgtgga gaacacctcc tactggctgc  
 420  
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa  
 480  
 cagtacaat cacaaccng cacgtctagc caggtgactt tccccattga cttttttgaa  
 540  
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat  
 600  
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc  
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg  
 720  
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga  
 780  
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tcccccttcac cagagaagaa  
 840  
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcagggt  
 900  
 gtcacatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct  
 960  
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactctg  
 1020  
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaaact  
 1080  
 gtccctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc  
 1140  
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg  
 1200  
 tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac  
 1260  
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc  
 1320  
 agtgcgtgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt  
 1380  
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa  
 1440  
 attctcaagt gccactcaaa actgagggta agcc  
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
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Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20					25						30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55					60				
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65					70				75					80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85				90							95	
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100					105						110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115					120						125		
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
		130					135					140			
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

```

145          150          155          160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
          165          170          175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
          180          185          190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
          195          200          205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
          210          215          220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
225          230          235          240
Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
          245          250          255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
          260          265          270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
          275          280          285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
          290          295          300
Gln Gln Ser Lys Val Glu Gly Gly
305          310

```

&lt;210&gt; 2151

&lt;211&gt; 511

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2151

```

gccggcggttt acctgtggggg cccgggtcggg cgcggaaga cctggctgat ggatcaattc
60
caccaaagcc tgnncgggtg cggcgcnng cggcagcact ttcattcactt catgggctgg
120
gtgcatcagc gctcctttca gttgaccggg atcgccgac cattgcgggc gctggctcgt
180
gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tgttcgtcaa tgacatcggt
240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggtc
300
tgacacctcca atctgccgcc ggatcagctg tatgccgacg gttcaaccg cgaccgcttc
360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcgga
420
gatcatcgct tgcattccgg cgccatcgag cagcgttact gggtcgctct gccggagcag
480
ggtagcgcgt tgagccagggt gttcgacgcg t
511

```

&lt;210&gt; 2152

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2152

```

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

```

1	5	10	15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln			
	20	25	30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu			
	35	40	45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala			
	50	55	60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly			
65	70	75	80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly			
	85	90	95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala			
	100	105	110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys			
	115	120	125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu			
	130	135	140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln			
145	150	155	160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala			
	165	170	

&lt;210&gt; 2153

&lt;211&gt; 528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2153

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nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
60
tcagtacgtg cacggcgatt ggcggcgga attgggacca ctccgcgctg atcaagggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccaccttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgtt
240
atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
cacccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attggggccg gcaaaaccgc acccgccatg gccctcgctg tcgagaacgg ctggcaaggc
420
gaagtcaccg gcctggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgtcaccc ggtgccggat gccgccggcc tggcggtg
528

```

&lt;210&gt; 2154

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2154

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
85           90           95

```

&lt;210&gt; 2155

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2155

```

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccc actgcgaggt gctcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg
240
cgcgccctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

&lt;210&gt; 2156

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
85           90

```

&lt;210&gt; 2157

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc  
 60  
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt  
 120  
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc  
 180  
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttggtcca cgtttccggc  
 240  
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg  
 300  
 ccgattcatg gtgaggtgcg tcatcttgtc gctaattgcc atctggccaa agcaaccggt  
 360  
 gtcgatgaga acaacgtggt gcttgctcag gacggcgggg ttattgacct tgttgacgga  
 420  
 gtaccgcgag ttgttgga ggtcgtatgcc tcgtacatcc ttgttgacgg atctgggggtg  
 480  
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg  
 540  
 tcagtcgtca ccgtggtcga caccgcctcg gcgtcagtgg tgtctcgccc ggcatccag  
 600  
 gcgcgtggtt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc  
 660  
 gagctagaga aggcgatggc cggtggtatg gacgataccc accggttgca a  
 711

&lt;210&gt; 2158

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1			5						10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40					45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55					60				
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
	65				70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85					90					95		
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
	130					135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
	145				150					155				160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165					170					175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

	180		185		190										
Val	Val	Ser	Arg	Pro	Ala	Ile	Gln	Ala	Arg	Gly	Phe	Ala	Glu	Gly	Asp
	195						200					205			
Ser	Val	Phe	Ala	Glu	Ile	Thr	Asp	Gln	Ile	Val	Thr	Glu	Leu	Glu	Lys
	210					215					220				
Ala	Met	Ala	Gly	Gly	Met	Asp	Asp	Thr	His	Arg	Leu	Gln			
225					230					235					

<210> 2159  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 2159  
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 60  
 ggcagcagct ccaggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta  
 120  
 cctgtttgga aaagtgtct ctgcagatgg tgggtgagag ttcgctgcca gggccactgt  
 180  
 cttccctgcc ctgcggacac ttcttcccca ccttcctaaa gctgtgggag acctggagcc  
 240  
 gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca  
 300  
 tgggggcctt ctggttctcc tt  
 322

<210> 2160  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

Met	Val	Ala	Pro	Gly	Cys	Asp	Phe	Leu	Arg	Phe	Leu	Ser	Gln	Arg	Ala
1			5					10					15		
Ile	Asp	Ala	Pro	Arg	Leu	Gln	Val	Ser	His	Ser	Phe	Arg	Lys	Val	Gly
			20					25				30			
Lys	Lys	Cys	Pro	Gln	Gly	Arg	Glu	Asp	Ser	Gly	Pro	Gly	Ser	Glu	Leu
		35				40					45				
Ser	Pro	Thr	Ile	Cys	Arg	Asp	Asn	Phe	Ser	Lys	Gln	Val	Glu	Gly	Asn
	50				55					60					
Arg	Leu	Leu	Leu	His	Lys	Ala	Leu	Pro	Gly	Arg	Pro	Trp	Ser	Cys	Cys
65				70				75			80				
Pro	Ala	Ser	Trp	Cys	Pro	Phe	Thr	Arg	Cys	Arg	Leu	Ser	Arg	Gly	Trp
			85					90				95			
Ser	Val	Leu	Ala												
			100												

<210> 2161  
 <211> 1070  
 <212> DNA  
 <213> Homo sapiens

<400> 2161

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 120  
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa  
 180  
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg  
 240  
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct  
 300  
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca  
 360  
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga  
 420  
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaagggtgc aaagtaagag  
 480  
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaatgttag aagtaatggg  
 540  
 tttggtcagt atggtgagag gtgagagagg ctaaaggga tgggcataaa gggcaggcca  
 600  
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga  
 660  
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccattggg aggggagtat  
 720  
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg  
 780  
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga  
 840  
 agaaagtga gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact  
 900  
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc  
 960  
 tggctagctg agtaaaggac catcgataa aacagacaaa agttaagact agatggagtg  
 1020  
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct  
 1070

&lt;210&gt; 2162

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5				10						15	
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
		20						25					30		
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
		35					40					45			
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
	50					55					60				
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65					70					75				80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser



85 90 95  
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile  
 100 105 110  
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr  
 115 120 125  
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro  
 130 135 140  
 Tyr  
 145

<210> 2163  
 <211> 657  
 <212> DNA  
 <213> Homo. sapiens

<400> 2163  
 tattttaaatc tttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcgggc  
 60  
 ggcctccctc caatccacct ccacttctca caccaccccc gctctcccc ccccccttt  
 120  
 tggttccggg ttggaaggtt gggtgaaatg ggaaccgaat accaatttca cccgggaacc  
 180  
 agtaatgccc atgataaccg ccaagtggg accgaagttg ggatccataa gtacgggcgg  
 240  
 ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgctc  
 300  
 agacatgcca agaggctctc tctccaggag agccacctgt gaaacccacc cggcatgctc  
 360  
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct  
 420  
 cagacaggag tccgtcccggt ccagtcccat catccaaga aacatccggc cgcactccct  
 480  
 gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac  
 540  
 tttgatccct tccccaagag gaagagtgt acctagggac aagtgtggtg cgcacaggca  
 600  
 tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg  
 657

<210> 2164  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 2164  
 Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser  
 1 5 10 15  
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe  
 20 25 30  
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg  
 35 40 45  
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala  
 50 55 60  
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

65		70		75		80									
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
			85						90					95	
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
		100					105						110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
		115					120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
	130					135					140				
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145						150									

&lt;210&gt; 2165

&lt;211&gt; 962

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2165

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nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca
60
gcccagaggc ccgccgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaatc accccagcgc ctcatcccc gaatctgttc gccatctgct gtcgcccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatgcccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gtttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcggt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtcgcg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa
780
tcctcgtcgt ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

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&lt;210&gt; 2166

<211> 239  
 <212> PRT  
 <213> Homo sapiens

<400> 2166  
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser  
 1 5 10 15  
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr  
 20 25 30  
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr  
 35 40 45  
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp  
 50 55 60  
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly  
 65 70 75 80  
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr  
 85 90 95  
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys  
 100 105 110  
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val  
 115 120 125  
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val  
 130 135 140  
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala  
 145 150 155 160  
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu  
 165 170 175  
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp  
 180 185 190  
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile  
 195 200 205  
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu  
 210 215 220  
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu  
 225 230 235

<210> 2167  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 2167  
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg  
 60  
 catccacatt atcccgaactg gaagatctcg ccagggttacg gacagtggtc gcgtagcgaa  
 120  
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg  
 180  
 attcttcgag cgggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga  
 240  
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcggggtc  
 300  
 tgcgctgac tcccacagca taccc  
 325

<210> 2168  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2168  
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His  
   1                  5                  10                  15  
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly  
                   20                  25                  30  
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr  
           35                  40                  45  
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala  
           50                  55                  60  
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg  
 65                  70                  75                  80  
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg  
                   85                  90                  95  
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr  
                   100                  105

<210> 2169  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 2169  
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccc  
 60  
 atcctggaga aggtcgtaaa ggccggcaag ccgctgctcg tcacgcccga ggacatcgac  
 120  
 ggggaggccc tgtccaccct cgctgtcaat aagatccgcg gtaccttcag ctcggtggca  
 180  
 gtcaaggcgc cgggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc  
 240  
 accggtggtc aggtcgctgc tcccgagggt gggctcaagc tcgaccaggt gggcctcgag  
 300  
 gttcagggc  
 309

<210> 2170  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2170  
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala  
   1                  5                  10                  15  
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu  
                   20                  25                  30  
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val  
           35                  40                  45  
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

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      50              55              60
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
65              70              75              80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
      85              90              95
Val Gly Leu Glu Val Gln Gly
      100

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<210> 2171  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

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<400> 2171
cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat
60
atcatcaaag ttccagtga ggaagcaatt cctcgcgga aaattaaaaa aggtaatgtt
120
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
180
cgttttgatc gcaacgcagc gggtatcttg aatgcaaaca accagccagt cggtagacgt
240
atctttggcc ctgtaaccog tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
300
gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
420
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
480
agcgggcgtg gaaggcggaa tcattgaaca gaatgcat
518

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<210> 2172  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

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<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1      5      10      15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
20      25      30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
35      40      45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
50      55      60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65      70      75      80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
85      90      95
Ile Val Ser Leu Ala Pro Glu Val Leu
100      105

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<210> 2173  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

<400> 2173  
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag  
 60  
 cgggcgcggtg ccttttgcgg cgggggtttcg agcattcatc tggatgcagc attttcgcac  
 120  
 gcattttcttg taccctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac  
 180  
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggatgcagaa gtacagcaca  
 240  
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa  
 300  
 agagagatgg agctctatgg ccccaaaaag cgtggaccca agcccaaaac cttcctctc  
 360  
 aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc  
 420  
 atccgatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg  
 475

<210> 2174  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2174  
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala  
 1 5 10 15  
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile  
 20 25 30  
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys  
 35 40 45  
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg  
 50 55 60  
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr  
 65 70 75 80  
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe  
 85 90 95  
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly  
 100 105 110  
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala  
 115 120 125  
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro  
 130 135 140  
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg  
 145 150 155

<210> 2175  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2175

cgcgacaccc tctttggtgg gcgccttcct tctccgaatt cggaaccct ccagactctg  
60  
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac  
120  
cgctcggta tcattgatga ccaggggcat ttcttgcatc ccaaccagat cctcgtattg  
180  
ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg  
240  
acgacccacc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg  
300  
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag  
360  
tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc  
420  
accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt  
462

&lt;210&gt; 2176

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2176

Arg	Asp	Thr	Leu	Phe	Gly	Gly	Arg	Leu	Pro	Ser	Pro	Asn	Ser	Arg	Thr
1			5					10						15	
Leu	Gln	Thr	Leu	Ala	Gln	Glu	Val	Val	Glu	Arg	Gly	Ala	Asp	Ile	Gly
			20					25					30		
Ile	Ala	Thr	Asp	Gly	Asp	Ala	Asp	Arg	Leu	Gly	Ile	Ile	Asp	Asp	Gln
			35					40					45		
Gly	His	Phe	Leu	His	Pro	Asn	Gln	Ile	Leu	Val	Leu	Leu	Tyr	Thr	Tyr
			50				55					60			
Leu	Leu	Glu	Asp	Lys	Gly	Trp	Gln	Val	Pro	Cys	Val	Arg	Asn	Leu	Ala
65					70					75				80	
Thr	Thr	His	Leu	Leu	Asp	Arg	Val	Ala	Glu	Ala	His	Gly	Gln	Thr	Cys
			85						90					95	
Tyr	Glu	Val	Pro	Val	Gly	Phe	Lys	Trp	Val	Ser	Ser	Lys	Met	Ala	Glu
			100					105					110		
Thr	Asn	Ala	Val	Ile	Gly	Gly	Glu	Ser	Ser	Gly	Gly	Leu	Thr	Val	Gln
			115				120					125			
Gly	His	Ile	Ala	Gly	Lys	Asp	Gly	Val	Tyr	Ala	Gly	Thr	Leu	Leu	Val
			130				135					140			
Glu	Met	Ile	Ala	Lys	Arg	Gly	Lys	Lys	Leu						
145							150								

&lt;210&gt; 2177

&lt;211&gt; 478

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2177

ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg  
60

accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac  
 120  
 gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct ccttgtccac  
 180  
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg  
 240  
 tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtct gccggtcggc  
 300  
 gttcctgacc ctgagacgtg gcggcgatc aaagacggcg aggatattcc ggatgccgag  
 360  
 gtcacgcggg ccatgtcttg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg  
 420  
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac  
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10						15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20						25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
	35						40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
	65				70					75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90						95	
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
		100						105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115					120					125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135					140				
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcattcc gagtggacgt cgagcgctgc attaacgggg ccggcgcggt gggcgcacac  
 60  
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc  
 120  
 tccgctgctt aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgctg  
 180



ctccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag  
 240  
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggg  
 296

<210> 2180  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 2180  
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala  
 1 5 10 15  
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg  
 20 25 30  
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg  
 35 40 45  
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile  
 50 55 60  
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln  
 65 70 75 80  
 Glu Arg Leu Ala Lys Ala Ala  
 85

<210> 2181  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2181  
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcac ggcgcgcctg  
 60  
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc  
 120  
 acgctggcat cgccggaagc ggggtgtcgtc agcgaaactga acgtgcgcga cgggtgcgatg  
 180  
 gtcgcgccgg ggcagacgct cgcgagatt tcgggcctct cgaagctctg gctgatcgtc  
 240  
 gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc  
 300  
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcg agatcctgcc gggcatcacc  
 360  
 accagtagcc gcacgcttca ggcgcgc  
 387

<210> 2182  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2182  
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg  
 1 5 10 15  
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

                20                25                30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35                40                45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50                55                60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
65                70                75                80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85                90                95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100                105                110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
      115                120                125
Arg

```

<210> 2183  
 <211> 310  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2183
aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggga ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggg tcaagagggt attctaggag atacaagaaa tatctcctgg
180
gggcatccaa aggggaataac actgtaatct tgagtgatgt atggttccat tgcccagagga
240
atagggatga aaaccataaa ctcctttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

```

<210> 2184  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1                5                10                15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
      20                25                30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
      35                40                45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
50                55                60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65                70                75                80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
      85                90                95
Val Phe Gln Ala

```

100

&lt;210&gt; 2185

&lt;211&gt; 723

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2185

ngaatatcca tgcagcagct cgtcgacaat ttgacgggtg ccatccctga cgatcttgac  
60

tctcttgtga ccctgcccgg agtcgggtcgt aagaccgcca atgttgtttt aggtaatgcc  
120

ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc  
180

tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgacccc  
240

tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggcgggcgcg ctgtcactcg  
300

cggcgtcctg cctgcgggggt atgcccgggt gccgagtgggt gcccgtcctt cggggaaggc  
360

ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga  
420

acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca  
480

tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga  
540

ttgcgaaaag ttccgggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat  
600

gccttgggtga gggggccgacg atctccatgt ctcgggcgac atcgaggggc gtgaccgtcg  
660

tgacgatctg ggcgtcgtgg tgtcgacccat gtcgtagtga ggctccgctc attgcgaacg  
720

cgt

723

&lt;210&gt; 2186

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2186

Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro  
1 5 10 15

Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr  
20 25 30

Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro  
35 40 45

Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala  
50 55 60

Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro  
65 70 75 80

Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg  
85 90 95

Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```
<210> 2187
<211> 342
<212> DNA
<213> Homo sapiens
```

```
<210> 2188
<211> 51
<212> PRT
<213> Homo sapiens
```

```
<210> 2189
<211> 1412
<212> DNA
<213> Homo sapiens
```

1618

atcgaggcaa tctgtgcttg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc  
 300  
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc  
 360  
 cgggtgatcg ggcctggca cgagtggatg aaccgctggc ccacccctga tgatttggcg  
 420  
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccg gcgtcgggcc  
 480  
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgccaac  
 540  
 agtgacgacg agctcgtgc cctcccgggt attggcgact acaccgagc cgcatcgtc  
 600  
 tcttttgcgt ttggcgccg cgccacagt cttgacacca atgtacgtcg cctcatcgt  
 660  
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga ggggtagtc  
 720  
 gccgacgctg tggttccga cgaagacgtc cgagcgccca agtgggcggt ggcgtcgatg  
 780  
 gaattggggg cactggatg cagggcgcg tctccgagc gtgaggtctg cccgatccgg  
 840  
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgcccg tcgaggacag  
 900  
 ccatggaagg gcacggatcg ccagtgcgc ggcgtgatta tggacgtggt gcgcaacagc  
 960  
 cctcacgggg tgaagggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca  
 1020  
 aggtgcctgg aatccttact cgatgacggt ttagtgacc gacgaggtaa ccttattagc  
 1080  
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc  
 1140  
 cgctgggtta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca  
 1200  
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca  
 1260  
 cattgtcgac catctgcgtt ctttggggca ctcggagtc atcggagatc tttaccaact  
 1320  
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa  
 1380  
 gatctggaag atttccgggg gagacgtcat ga  
 1412

&lt;210&gt; 2190

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20					25					30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35					40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50                      55                      60  
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala  
 65                      70                      75                      80  
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser  
                     85                      90                      95  
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser  
                     100                      105                      110  
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser  
                     115                      120                      125  
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr  
                     130                      135                      140  
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys  
 145                      150                      155                      160  
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val  
                     165                      170                      175  
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu  
                     180                      185                      190  
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys  
                     195                      200                      205  
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn  
                     210                      215                      220  
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys  
 225                      230                      235                      240  
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys  
                     245                      250                      255  
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg  
                     260                      265                      270  
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn  
                     275                      280                      285  
 Leu Ile Ser Leu  
 290

&lt;210&gt; 2191

&lt;211&gt; 502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2191

nnacgcgtcg agaatctcta ctccctgcccg aacaacgtcc ggcttcgtca ggctcacgat  
 60  
 gactcccttg acgacgacac catttccggg ggtagccac attggtgctg cctcatggac  
 120  
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc  
 180  
 agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc  
 240  
 cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc  
 300  
 gccgcggaa aagtgcgtcg ccactttttc gataaccggg ttcgcctcaa ctacctggtc  
 360  
 aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg  
 420  
 cgtgccgaga tcacgaaata ctctggggc gatccgcaga aggtacacga cgccgtcgag  
 480

gctgggattg ccggtggtgc ac  
502

<210> 2192  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2192  
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile  
1 5 10 15  
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu  
20 25 30  
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp  
35 40 45  
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys  
50 55 60  
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu  
65 70 75 80  
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val  
85 90 95  
Glu Ala Gly Ile Ala Gly Gly Ala  
100

<210> 2193  
<211> 321  
<212> DNA  
<213> Homo sapiens

<400> 2193  
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc  
60  
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac  
120  
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tcctccaca  
180  
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga  
240  
cagaggtccc actgccttgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc  
300  
tgtgtgtgtt taggttgggg a  
321

<210> 2194  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2194  
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala  
1 5 10 15  
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu  
20 25 30  
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

          35          40          45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50          55          60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65          70          75          80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
          85          90          95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
          100          105

```

&lt;210&gt; 2195

&lt;211&gt; 504

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2195

```

naccgctctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gctccctggc
60
gacggtgtgg cacaccccaa ctttggcaat atcgccacg acctgggtgct gttgcacagc
120
ctgggtgtgc gtctggtact ggtccacggt tcgcgccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtgccga ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaaggcat caaccgctg ctcgatgagc gctcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

```

&lt;210&gt; 2196

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2196

```

Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
  1          5          10          15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20          25          30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35          40          45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50          55          60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
      65          70          75          80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
          85          90          95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```



```

      100      105      110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
      115      120      125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
      130      135      140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145      150      155      160
Pro Leu Gly Tyr Ser Pro Thr Gly
      165

```

&lt;210&gt; 2197

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2197

```

acaagtcctg cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggctg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggtgg tgcaagtgtt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

&lt;210&gt; 2198

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1      5      10      15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
      20      25      30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
      35      40      45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
      50      55      60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65      70      75      80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
      85      90      95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
      100      105      110
Gly Ile Asp Gln Arg
      115

```

&lt;210&gt; 2199

&lt;211&gt; 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca  
 60  
 ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa  
 120  
 ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgctt gcctgcctgc  
 180  
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag  
 240  
 atccctttct gcgacgcca ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc  
 300  
 ggcgggccgg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc  
 360  
 gtcctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc  
 420  
 aagccactca ctctgctctg gggtaagtcc cgccggc  
 457

&lt;210&gt; 2200

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
		20						25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
		35					40					45			
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
	50					55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70					75				80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85						90				95		
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100					105					110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
		115					120					125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
	130					135					140				
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145						150									

&lt;210&gt; 2201

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2201

agtactgcga tggacagcta tgctgtggat ggtggtcgca aattacatgt ttgtggtaac  
 60  
 aaccttgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat  
 120  
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt  
 180  
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa  
 240  
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat  
 300  
 gatttcttcg tcttacgtga gggcgctgct ggttta  
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1				5					10					15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
			20					25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35					40					45			
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
		50				55				60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
				85				90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcacag ccgggggtggg aagctgtgca gacagccccg gatctgggac  
 60  
 gtgatggaaa actcaacaga ctggttcaga tcttggcccc gagcccagag gcaccgggga  
 120  
 cccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtagggt  
 180  
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc  
 240  
 ctgtccctgc ctccctccga tgctctgatg gtg  
 273

<210> 2204

<211> 88

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
      20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
      35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
      50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
                        85

```

&lt;210&gt; 2205

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2205

```

gnnnnnggng nnnnactggg gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtcctcg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcacccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgcctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

&lt;210&gt; 2206

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
      20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
      35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
      50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

```

      85              90              95
Pro Arg Lys Asn Pro Ala Leu Trp Asp Leu Gly Ile Ile Gln Ala Lys
      100              105              110
Thr Arg Ser Leu Arg Asp Arg Trp Ser Glu Val Pro Arg Lys Leu Glu
      115              120              125
Phe

```

<210> 2207  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2207
atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggc
60
cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc
120
atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
180
accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
240
agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg
300
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca
360
aggtcctccg ggtccagcc ctcacctgcc cgcagctcga gttactcgga agccaacgag
420
cctgatcttc agatggccaa cggtggaag agcctctcca tgggtggacct ccaggacgcc
480
cgcacgctgg atggggaggc aggctccccg gcgggccccg acgtcctccc cacagatggg
540
caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
600
gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
660
ggcgcg
667

```

<210> 2208  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2208
Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
1      5      10      15
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
20     25     30
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
35     40     45
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
50     55     60
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

&lt;210&gt; 2209

&lt;211&gt; 353

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2209

```

ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaaggggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggccccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

&lt;210&gt; 2210

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1          5          10          15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20          25          30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35          40          45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50          55          60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65 70 75 80  
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala  
85 90

<210> 2211  
<211> 493  
<212> DNA  
<213> Homo sapiens

<400> 2211  
ctgaccacat ctccgacgat cctagacctc tgttctgcat ctcggacacc accgactgct  
60  
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga  
120  
aggaaggagg ggaaggggat ggatccatgt actttggggg tggagaaatg ggggacagca  
180  
agtctcctca acccaaatac agcccccttg ggaggctcct gccccgtctc tgtggatagt  
240  
gagcccagct gcaagggcgg cctgccaggg acaaaccac caaaaggaaa gatgttgtag  
300  
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc  
360  
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc  
420  
atgcgcaaag tcatgccccat caccaagtcc agcagaggcg ccggctggag gcgaccagag  
480  
ctgtcatccc ggg  
493

<210> 2212  
<211> 126  
<212> PRT  
<213> Homo sapiens

<400> 2212  
Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val  
1 5 10 15  
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu  
20 25 30  
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr  
35 40 45  
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln  
50 55 60  
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala  
65 70 75 80  
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys  
85 90 95  
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser  
100 105 110  
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln  
115 120 125

<210> 2213  
<211> 327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2213

acgcgtccga cggcagcttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt  
 60  
 gccggtgctt cgacacactg gggttatatcg cctcaaagc acaggtctac gaaggttctg  
 120  
 acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgctg  
 180  
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag  
 240  
 atgccccgtt tggctgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg  
 300  
 ctcgaccaca atcgacgcgc gttggaa  
 327

&lt;210&gt; 2214

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5					10					15	
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20				25						30		
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35				40					45				
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70				75					80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
				85				90						95	

&lt;210&gt; 2215

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2215

ctggggatca tgcctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgatc  
 60  
 ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtagc  
 120  
 acccgttacc tcaactctcgt gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc  
 180  
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctccggtcttc  
 240  
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgatcat gtggatgggt  
 300  
 gagtcatca ccgaccgagg taccggcaac ggtatgtcga tcatgatttt cactcagatt  
 360



gcggcgcgtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccggtcag  
 420  
 gctcacgcgt  
 430

<210> 2216  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2216  
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu  
 1 5 10 15  
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser  
 20 25 30  
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu  
 35 40 45  
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg  
 50 55 60  
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe  
 65 70 75 80  
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val  
 85 90 95  
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met  
 100 105 110  
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu  
 115 120 125  
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala  
 130 135 140

<210> 2217  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 2217  
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct  
 60  
 atgacgtggc tcgatgacga cgtgggccc gacctgttga atcaggctga ttccatggac  
 120  
 catgccctgg aggccaccgt cccaggctcg gtcaccacgc cggacgcccc agtcatccag  
 180  
 acctgtgccg tggtgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac  
 240  
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag  
 300  
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct  
 360  
 gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggtttgcta  
 420  
 cgagagaatg tctttgctca gtcc  
 444

<210> 2218

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2218  
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr  
 1 5 10 15  
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu  
 20 25 30  
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro  
 35 40 45  
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val  
 50 55 60  
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp  
 65 70 75 80  
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala  
 85 90 95  
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala  
 100 105 110  
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser  
 115 120 125  
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val  
 130 135 140  
 Phe Ala Gln Ser  
 145

<210> 2219  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2219  
 acgcgtaccg tcgttgccat gagcgtcctg ccactggaaa ttggctgtc attcagctac  
 60  
 ggcatcacga atatggcgtg gatgtggcta tggctcgacg agcccggaag ccgttggggg  
 120  
 tggctgaccc ttttccccgc tgggtggctg accagcgctt tggctcagtc ggggttcggt  
 180  
 ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc  
 240  
 gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag  
 300  
 cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca  
 360  
 gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtat cgattctctc  
 420  
 atcgagacga atctcggcgc tccgttcattg ttgctcattg tgaaagcttg gcgcgcgcca  
 480  
 cccgaaggaa ttcttggtc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc  
 540  
 tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga  
 600  
 gcgaagggcg cgggtgtagg tctccccggg gctcgttggtg gtccttcctc tgcgtgacgc  
 660

agagccgtgt gatgaggcga agtcatga  
688

<210> 2220  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 2220  
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile  
1 5 10 15  
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg  
20 25 30  
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu  
35 40 45  
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg  
50 55 60  
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly  
65 70 75 80  
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr  
85 90 95  
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp  
100 105 110  
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro  
115 120 125  
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met  
130 135 140  
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly  
145 150 155 160  
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met  
165 170 175  
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro  
180 185

<210> 2221  
<211> 530  
<212> DNA  
<213> Homo sapiens

<400> 2221  
actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc  
60  
aaagaagagc aaaccgccat cgctaacgtc ctttccgaca tggacaccga actcgacgcc  
120  
ctacaacaac gcctcagtaa aaccaaacc atcaagcaag gcatgatgca agaactactc  
180  
acagggaaaa cgagggttgg atgagccaca aggtgaattt agtgcattgag ctggataagc  
240  
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc  
300  
ggccttataa atgggtcaca gagaacctaa atgcgctgat gattgattta cgaatttatc  
360  
gtaacaaatc ggcttatcgg ctggggacgg tgggttttca ttatcataat gaaccgtag  
420

acaacgagaa taccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt  
 480  
 tgctgctagt caaagccatt ttagaagaac ggttgctctgc gttaacgcgt  
 530

<210> 2222  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 2222  
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu  
 1 5 10 15  
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser  
 20 25 30  
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr  
 35 40 45  
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr  
 50 55 60  
 Arg Leu Val  
 65

<210> 2223  
 <211> 482  
 <212> DNA  
 <213> Homo sapiens

<400> 2223  
 cggccgcccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg  
 60  
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga  
 120  
 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg  
 180  
 cgctgcctgc gctgatatag gcctggagat gcccctggc gtgtcgggca acctcgtagt  
 240  
 tcaggccgctc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac  
 300  
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggccc gggcaagccc  
 360  
 gctccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat  
 420  
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttcccacgc  
 480  
 gt  
 482

<210> 2224  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2224  
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

```

      1           5           10           15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His
      20           25           30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu
      35           40           45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
      50           55           60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
      65           70           75           80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr
      85           90           95
Asp Ala Gly Leu Thr Thr Ala Ala Ala
      100           105

```

<210> 2225  
 <211> 753  
 <212> DNA  
 <213> Homo sapiens

<400> 2225  
 nacgcgtctg atccacacgg gccactgacg tggcgttatg acagggagcg ggccggtgcc  
 60  
 ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg  
 120  
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc  
 180  
 aaggagggca tcggccacac aggttggggtc gtctcggacg agctcggggc ggtgggcaac  
 240  
 gaggattatt gcgctgtcat cgcccgatg gaaaacggag tgatgtgcac cctggagtcc  
 300  
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<210> 2226  
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 <213> Homo sapiens

<400> 2226  
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Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
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Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
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&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2227

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324

&lt;210&gt; 2228

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2228

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

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Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20           25           30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35           40           45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50           55           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65           70           75           80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85           90           95
Glu Ala

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&lt;210&gt; 2229

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2229

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320

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&lt;210&gt; 2230

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2230

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      1           5           10           15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20           25           30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35           40           45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50           55           60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65           70           75           80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85           90

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&lt;210&gt; 2231

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2231

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cagctcttaa g
671

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&lt;210&gt; 2232

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2232

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Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20     25     30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35     40     45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50     55     60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65     70     75     80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85     90     95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100    105    110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115    120    125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130    135    140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

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<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

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 Ile Gln Ser Lys Leu Tyr Arg Ala Ala Leu Glu Thr Asp Glu Asn Leu  
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 Ala Val Asn Trp Leu Gly Tyr Ala Tyr Leu Tyr Ile Arg Met Leu Arg  
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 Ser Pro Thr Leu Tyr Gly Ile Ser His Asp Asp Leu Lys Gly Asp Pro  
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 Leu Leu Asp Gln Arg Arg Leu Asp Leu Val His Thr Ala Ala Leu Met  
 515 520 525  
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 Gln Val Thr Glu Leu Gly Arg Ile Ala Ser His Tyr Tyr Ile Thr Asn  
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 Met Arg Ala Ile Phe Glu Ile Val Leu Asn Arg Gly Trp Ala Gln Leu  
 660 665 670  
 Thr Asp Lys Thr Leu Asn Leu Cys Lys Met Ile Asp Lys Arg Met Trp  
 675 680 685  
 Gln Ser Met Cys Pro Leu Arg Gln Phe Arg Lys Leu Pro Glu Glu Val  
 690 695 700  
 Val Lys Lys Ile Glu Lys Lys Asn Phe Pro Phe Glu Arg Leu Tyr Asp  
 705 710 715 720  
 Leu Asn His Asn Glu Ile Gly Glu Leu Ile Arg Met Pro Lys Met Gly  
 725 730 735  
 Lys Thr Ile His Lys Tyr Val His Leu Phe Pro Lys Leu Glu Leu Ser  
 740 745 750  
 Val His Leu Gln Pro Ile Thr Arg Ser Thr Leu Lys Val Glu Leu Thr  
 755 760 765  
 Ile Thr Pro Asp Phe Gln Trp Asp Glu Lys Val His Gly Ser Ser Glu

```

      770              775              780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His
785              790              795              800
His Glu Tyr Phe Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu
      805              810              815
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe
      820              825              830
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro
      835              840              845
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr
      850              855              860
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser
865              870              875              880
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile
      885              890              895
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe
      900              905              910
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala
      915              920              925
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile
      930              935              940
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu
945              950              955              960
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu
      965              970              975
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser
      980              985              990
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys
      995              1000              1005
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile
      1010              1015              1020
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg
1025              1030              1035              1040
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser
      1045              1050              1055
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser
      1060              1065              1070
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu
      1075              1080              1085
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu
      1090              1095              1100
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro
1105              1110              1115              1120
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu
      1125              1130              1135
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln
      1140              1145              1150
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys
      1155              1160              1165
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr
      1170              1175              1180
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu
1185              1190              1195              1200
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys

```

1205 1210 1215  
 Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln  
 1220 1225 1230  
 Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp  
 1235 1240 1245  
 Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu  
 1250 1255 1260  
 Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys  
 1265 1270 1275 1280  
 Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys  
 1285 1290 1295  
 Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn  
 1300 1305 1310  
 Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg  
 1315 1320 1325  
 Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg  
 1330 1335 1340  
 His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp  
 1345 1350 1355 1360  
 Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala  
 1365 1370 1375  
 Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr  
 1380 1385 1390  
 Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg  
 1395 1400 1405  
 Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro  
 1410 1415 1420  
 Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val  
 1425 1430 1435 1440  
 Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr  
 1445 1450 1455  
 Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu  
 1460 1465 1470  
 Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile  
 1475 1480 1485  
 Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala  
 1490 1495 1500  
 Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser  
 1505 1510 1515 1520  
 Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile  
 1525 1530 1535  
 Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu  
 1540 1545 1550  
 Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln  
 1555 1560 1565  
 Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu  
 1570 1575 1580  
 Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val  
 1585 1590 1595 1600  
 Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val  
 1605 1610 1615  
 Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val  
 1620 1625 1630  
 Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr



```

      1635      1640      1645
Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
      1650      1655      1660
Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
1665      1670      1675      1680
Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
      1685      1690      1695
Asp Ser Asp Ser Asp
      1700

```

<210> 2235  
 <211> 586  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2235
tctagaatga gtatgaggac actctcacca gagtgagggtg aaggtgtata cagctggcac
60
tcagtgttg cacattctcc actggcagaa tgactcccga cgtgggtcgg gctccccgga
120
agacaccct cgaagcagtgt gtgcctctag catcttcgac ctgaggaacc tggcagctga
180
ctcattgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
240
agcccttcga cggcagcacc ggccccggc cctgtctccc ctctaccgg cacctgacga
300
ggatgaagcc ggggaacgct gtagccgct agagccacc cgcgagcac tttggacaaa
360
ggatcttggt caagtgtctg tcgtcaagt tcgagattga aattgagccc atctttggga
420
tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
480
tgaactcgga ctccatgaag gggctgtctc gggctcatgg caccaccct gccatctcca
540
ccctggcccc ctctgccatc ttctctgtga cctaccctc acgcgt
586

```

<210> 2236  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2236
Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
1      5      10      15
Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
20      25      30
Asp Pro Lys Asp Gly Leu Asn Phe Leu Glu Leu Glu Arg Gln Thr
35      40      45
Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
50      55      60
Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
65      70      75      80
Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

```

```
<210> 2237
<211> 421
<212> DNA
<213> Homo sapiens
```

```
<210> 2238
<211> 124
<212> PRT
<213> Homo sapiens
```

```
<210> 2239
<211> 623
```

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct  
 60  
 agccattcca ggcttgggcc catggtcacc ccacacaata aggctaagag tccagggtgc  
 120  
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga  
 180  
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct  
 240  
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca  
 300  
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc  
 360  
 atcagtgggt cagttagttc tgcaagacct ttgggcagct ctctgtggccc tggccggcct  
 420  
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc gggcggtct  
 480  
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat  
 540  
 tcagtccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt  
 600  
 cccactataa agcctaagtg cac  
 623

&lt;210&gt; 2240

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50					55					60				
Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
65					70				75					80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85					90					95		
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130					135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145					150				155					160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

```
<210> 2241
<211> 656
<212> DNA
<213> Homo sapiens
```

```
<210> 2242
<211> 218
<212> PRT
<213> Homo sapiens
```

1650

```

      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

```

&lt;210&gt; 2243

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2243

```

gaattcagca tttaaatgtc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggttaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa .atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtccctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt ggcctctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggacct tgga
384

```

&lt;210&gt; 2244

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2244

```

Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95  
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser  
 100 105

<210> 2245  
 <211> 632  
 <212> DNA  
 <213> Homo sapiens

<400> 2245  
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct  
 60  
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt  
 120  
 gaggccacaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catggtgttt  
 180  
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgcg  
 240  
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg  
 300  
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg  
 360  
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag  
 420  
 gccgcttttag ccgagtgtcta cgaccggtgt tccgcacgggt aaaaacgttc ggaaatgaac  
 480  
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt  
 540  
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccca  
 600  
 ctttaagttca gtatcgacgg catgaatccg ga  
 632

<210> 2246  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 2246  
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His  
 1 5 10 15  
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr  
 20 25 30  
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp  
 35 40 45  
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu  
 50 55 60  
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg  
 65 70 75 80  
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys  
 85 90 95  
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val  
 100 105 110  
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115                      120                      125  
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala  
 130                      135                      140  
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg  
 145                      150

<210> 2247  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2247  
 gggcggttcgc ctccagggtt ctccccgaca ctggatgccca acctgcccag gggcagaagg  
 60  
 gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg  
 120  
 cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctgggcg  
 180  
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgcctctctg ctggggttga  
 240  
 taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa  
 300  
 tgtgccgtgt gagccatccc cctg  
 324

<210> 2248  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2248  
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg  
 1                      5                      10                      15  
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly  
 20                      25                      30  
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln  
 35                      40                      45  
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu  
 50                      55                      60  
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His  
 65                      70                      75                      80  
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser  
 85                      90                      95  
 Val Gly Glu Asn Pro Gly Gly Glu Arg  
 100                      105

<210> 2249  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2249  
 gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa  
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cggggttttc ccattcccac  
 120  
 ggtggaacc gcgccagtg aattgaaatc cgcttcctta aggcgaaatg ggccttaaa  
 180  
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcacctc  
 240  
 ccggcttttc tcccgaccgc gtgcagggtg ggctgcgctg ggcctgggag gaactgggag  
 300  
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg  
 360  
 gccacatggg gacaggcctc ctgggggcag atct  
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1				5					10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
		20						25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35					40					45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55					60				
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70					75				80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
			85					90						95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
			100												

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca  
 60  
 gtggaatagt cagggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccactcgcca  
 120  
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggtt ataacgccga agcggtaaaa  
 180  
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg  
 240  
 agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag  
 300  
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct  
 360  
 acatcgtaaa cgttatattt tgatagtttg acgggttaatg ctggtaatgg tggttttctt  
 420



cattgcattc agatggatac atctgtcaac gccgctaatac aggttggttc tgttggtgct  
 480  
 gatattgctt ttgatgccga ccctaaattt ttgcctggtt tggttcgctt tgagtcttct  
 540  
 tcggttcgga ctaccctccc gactgcctat gatgtttatc ctttggatgg tcgccatgat  
 600  
 ggtgggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg  
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
			35				40					45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70				75					80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85					90					95		
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
		115					120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggcgcg attattcgcg  
 60  
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa  
 120  
 tcggcgatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc  
 180  
 agcgccgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgctc  
 240  
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc  
 300  
 tggaagcggc aaagttgacc gccttgg  
 327

<210> 2254

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2254  
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser  
                                   5                                  10                                  15  
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile  
                                   20                                  25                                  30  
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr  
                                   35                                  40                                  45  
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu  
                                   50                                  55                                  60  
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala  
                                   65                                  70                                  75                                  80  
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys  
                                   85                                  90                                  95  
 Leu Thr Ala Leu  
                                   100

<210> 2255  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 2255  
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca  
 60  
 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct  
 120  
 cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat  
 180  
 actcgtctta aggagcttgg ttggacgcta ctcttgagg tgcatgatga agtgatactg  
 240  
 gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag  
 300  
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca  
 357

<210> 2256  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 2256  
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser  
                                   5                                  10                                  15  
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His  
                                   20                                  25                                  30  
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp  
                                   35                                  40                                  45  
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys  
                                   50                                  55                                  60  
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

65          70          75          80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
          85          90          95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
          100          105          110
Ala Val Asp Ala Lys Cys Ala
          115

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<210> 2257
<211> 626
<212> DNA
<213> Homo sapiens

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<400> 2257
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120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agagggttgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttcctaggaa ggaaaatgaa
360
gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata
420
tatcctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

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<210> 2258
<211> 187
<212> PRT
<213> Homo sapiens

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```

<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1          5          10          15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
20          25          30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
35          40          45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
50          55          60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65          70          75          80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

```

      85              90              95
Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Asp Gly Leu Asn Gln
      100              105              110
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
      115              120              125
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
      130              135              140
Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
      145              150              155              160
Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
      165              170              175
Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
      180              185

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<210> 2259  
 <211> 425  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2259
acgcgtcaca atgataaagc cattatattc atcaagaggt aaatcattct tgaaattttc
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taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acgggtcatct acgactgtaa caccagagcc aataaacaat agcaaatacag taatagctcg
180
gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
aactccatt tcgctacca tgcatagaga attcagcttt gctttatcta cagtaaattcc
300
ttcaatagga gtccgtata gaacccttcc atcttcagca taaatagtct tatccccttg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

```

<210> 2260  
 <211> 141  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2260
Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
1      5      10      15
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
20     25     30
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
35     40     45
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
50     55     60
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
65     70     75     80
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr

```



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      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
      130              135

```

<210> 2263  
 <211> 491  
 <212> DNA  
 <213> Homo sapiens

<400> 2263  
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 60  
 tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg  
 120  
 gagggcacccc ggtctcgac cgggcgaatg ggcaccttca aacctggggc tgccgcattg  
 180  
 gctatttcac gtgggggttcc gggtatcccg attgctttag taggagcatg ggcggctatg  
 240  
 ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac  
 300  
 cctatggacc ctgttcccgg cgagatcgcc caccaattct ccgaacggat tcgtcgccag  
 360  
 gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac  
 420  
 ggagccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcatc caccaaccac  
 480  
 tcgacgtgca c  
 491

<210> 2264  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2264
Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala
  1              5              10              15
Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
      20              25              30
Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
      35              40              45
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
      50              55              60
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
      65              70              75              80
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
      85              90              95
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
      100              105              110
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

```

	115		120		125	
Ala	Arg	Ala	Tyr	Gly	Met	Pro
						Thr
						Leu
						Asp
						Glu
						Tyr
						Gly
						Arg
						His
						Arg
	130				135	
						140
Ala	Leu	Ser	Gln	Ala	Ser	Glu
						Ser
						Gly
						Asp
						Thr
						Ala
						Ser
						Thr
						Asn
						His
145				150		155
						160
Ser	Thr	Cys				

<210> 2265  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 2265  
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 gtcaacacgg cagacacatg ctggcagaaa ccttgctgga gttgccctg agcattgatg  
 120  
 cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac  
 180  
 cggaagggct cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata  
 240  
 tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc  
 300  
 tttagcacgt gactgggacc actggaca  
 328

<210> 2266  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

Met	Gly	Ile	Gly	Gln	His	Gly	Trp	Ile	Tyr	Cys	Ile	Thr	Cys	Leu	Pro				
1				5					10					15					
Ser	Gly	Lys	Ser	Gln	His	Gly	Arg	His	Met	Leu	Ala	Glu	Thr	Leu	Leu				
			20					25					30						
Glu	Leu	Pro	Leu	Ser	Ile	Asp	Ala	Tyr	His	Pro	Arg	Gly	Gly	Glu	Gly				
			35				40					45							
Gly	Gly	Arg	Asn	Gln	Ile	Arg	Val	Gln	Asn	Ala	Pro	Glu	Gly	Leu	Gly				
			50				55				60								
Asn	Val	Arg	Leu	His	Leu	Ala	Gly	Thr	Val	Asn	Ala	Thr	Thr	Asn	Ile				
			65				70				75				80				
Thr	His	Leu	Arg	Gln	Ala	Leu	Glu	Ser	Ser	Cys	Glu	His	Asn	Ser	Leu				
				85				90						95					
Thr	Pro	Asn	Leu																

<210> 2267  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

<400> 2267

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 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacaggtcac  
 120  
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac  
 180  
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg  
 240  
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaacctg accttgaagg  
 300  
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtattgc agagatgggc  
 360  
 gtcaacgcgt  
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
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Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
		20					25						30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35				40					45				
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65				70					75					80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
			85					90							

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatata cgcaagttcg acgaccagat cgaatcgatt  
 60  
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc  
 120  
 gacaaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca  
 180  
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag  
 240  
 caccacgacc cggctgcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat  
 300  
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg  
 360  
 gtggccttcg ggcattcctt tgccgagggg atcggcgata ccatacgcgt ctccttgctg  
 420



gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt  
 480  
 cctcgaggtc tagagatcgt ctctgc  
 507

<210> 2270  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 2270  
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln  
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 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg  
 20 25 30  
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr  
 35 40 45  
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala  
 50 55 60  
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys  
 65 70 75 80  
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala  
 85 90 95  
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala  
 100 105 110  
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala  
 115 120 125  
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val  
 130 135 140  
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg  
 145 150 155 160  
 Pro Arg Gly Leu Glu Ile Val Ser Cys  
 165

<210> 2271  
 <211> 573  
 <212> DNA  
 <213> Homo sapiens

<400> 2271  
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 60  
 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaacccg cacctcggaa  
 120  
 gaaggcatgg cgccgttgac ctcggacgcg gtggcgcggt tggccactta cagcgcacgg  
 180  
 ctggcgggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc  
 240  
 gagggcgact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa  
 300  
 cgggcgctca aggccaaggc cacgcgtacc gggcgtgtat cggcgcggat tctcgacgac  
 360  
 atgctcgctg gggtcatect gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg  
 420

ctgacggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggtat ttccgccacg  
 480  
 gtgtacccgg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg  
 540  
 atccactcca agggcgtgat gatacttacc ggt  
 573

<210> 2272  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 2272  
 Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe  
 1 5 10 15  
 Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln  
 20 25 30  
 Leu Leu Lys Thr Arg Thr Ser Glu Glu Gly Met Ala Pro Leu Thr Ser  
 35 40 45  
 Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His  
 50 55 60  
 Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser  
 65 70 75 80  
 Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala  
 85 90 95  
 Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg  
 100 105 110  
 Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile  
 115 120 125  
 Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu  
 130 135 140  
 Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr  
 145 150 155 160  
 Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn  
 165 170 175  
 Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly  
 180 185 190

<210> 2273  
 <211> 4355  
 <212> DNA  
 <213> Homo sapiens

<400> 2273  
 tctttccagc atgcctccgg cttcttgggg gaacacagtc ccggtggtca gaggtcctgc  
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 120  
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 180  
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 240  
 ccgcttgact atgagctcac ctacttctcg gaagctgcc tccagagcgc ctatgtgaaa  
 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact  
360  
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcgggggtc  
420  
ctgctgcact ccctgagtgg agtgctactg gagccccctg tcccaccctc tgcctgagtt  
480  
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540  
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780  
ggagaatttc acctttggta ccaggtggcc ctctccatgg tggcttgtgg gaagtcagcc  
840  
tacgtgtgtt ccctgctgcg ggagtgtgtg aagttgcggc cctcggaccc caccgtgccc  
900  
ctgatggcgg cgaaggtctg catcgggtcc cttcgtctgg tagaggaagc agagcacttt  
960  
gccatgatgg tgatcagcct cggagaggaa gccggggagt tcctcccaa gggctacctg  
1020  
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1380  
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1860  
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1920

ctggggccaca agagcttggc ccagaagggtg cttcgtgatg ccgtggagag gcagagtacg  
1980  
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2040  
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2100  
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2160  
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2280  
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2340  
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2580  
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2640  
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2700  
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2760  
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2820  
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2880  
ggtcccttga gggccaccaa catggaggta ggcagtttct aggactgtcc ccagtacatc  
2940  
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gcctctgtgt ccatgacacc tgtcttccgg gcctgggggc tgtgggtgta tgtcctccct  
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&lt;210&gt; 2274

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2274

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Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
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Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
			50			55				60					
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
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Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
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Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
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Leu	Ser	Gly	Val	Leu	Leu	Glu	Pro	Pro	Val	Pro	Pro	Ser	Ala		

145

150

155

&lt;210&gt; 2275

&lt;211&gt; 608

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2275

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&lt;210&gt; 2276

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2276

Ser	Thr	Asn	Asn	Thr	Lys	Glu	Asn	Arg	Arg	Pro	Gln	Lys	Glu	Glu	Pro
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Pro	Thr	Ala	Met	Thr	Pro	Pro	Val	Leu	Thr	Thr	Ala	Glu	Thr	Ser	Val
			35				40					45			
Lys	Pro	Ser	Val	Ser	Ala	Phe	Thr	His	Ser	Pro	Pro	Glu	Asn	Thr	Thr
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Gly	Ile	Ser	Ser	Thr	Ile	Ser	Phe	His	Ser	Arg	Thr	Leu	Asn	Leu	Thr
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Thr	Ile	Ala	Ser	Glu	Thr	Thr	Leu	Ser	Ser	Lys	Ser	His	Gln	Ser	Thr
			100					105					110		
Thr	Thr	Arg	Lys	Ala	Ile	Ile	Arg	His	Ser	Thr	Ile	Pro	Pro	Phe	Leu
			115				120					125			
Ser	Ser	Ser	Ala	Thr	Leu	Ile	Pro	Val	Pro	Ile	Ser	Pro	Pro	Phe	Thr

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 35 40 45  
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val  
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 His Ala Thr Pro Gln Glu Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr  
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 331

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 Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser  
 35 40 45  
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu  
 50 55 60  
 Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser  
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 Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile  
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 Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly  
 35 40 45  
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp  
 50 55 60  
 Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro  
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 6060  
 aagagagcag gctggccgc tgtgtctac tgtgtctgtc ccaggactcg gaaggtaggg  
 6120  
 agggagcgtg gccagggcgg ctgcctgcag gtgcgtgtcc tgctgctccc caactcaaca  
 6180  
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 6240  
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 6300  
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 6360  
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 6420  
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 6480  
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 6505

&lt;210&gt; 2286

&lt;211&gt; 1784

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2286

Pro	Val	Pro	Ala	Met	Pro	Gly	Gly	Pro	Ser	Pro	Arg	Ser	Pro	Ala	Pro
1				5				10						15	
Leu	Leu	Arg	Pro	Leu	Leu	Leu	Leu	Leu	Cys	Ala	Leu	Ala	Pro	Gly	Ala
			20					25					30		
Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
		35				40						45			
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
	50					55					60				
Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65				70						75				80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
			85						90					95	
Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
			100					105					110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
		115				120						125			
Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
		130				135					140				
Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
145				150						155				160	
Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
			165					170						175	
Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
			180					185					190		
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

	195					200					205				
Ser	Ala	Ser	Val	Pro	Arg	Ala	Gly	Val	Ser	Thr	Gly	Ala	Leu	Gly	Ala
	210					215					220				
Ala	Ala	Ala	Val	Ala	Ala	Ala	Thr	Ala	Arg	Arg	Leu	His	Gln	Arg	Ser
225					230					235					240
Val	Ser	Lys	Glu	Lys	Trp	Val	Glu	Thr	Leu	Val	Val	Ala	Asp	Ala	Lys
				245					250					255	
Met	Val	Glu	Tyr	His	Gly	Gln	Pro	Gln	Val	Glu	Ser	Tyr	Val	Leu	Thr
			260					265					270		
Ile	Met	Asn	Met	Val	Ala	Gly	Leu	Phe	His	Asp	Pro	Ser	Ile	Gly	Asn
		275					280					285			
Pro	Ile	His	Ile	Thr	Ile	Val	Arg	Leu	Val	Leu	Leu	Glu	Asp	Glu	Glu
					295						300				
Glu	Asp	Leu	Lys	Ile	Thr	His	His	Ala	Asp	Asn	Thr	Leu	Lys	Ser	Phe
305					310					315					320
Cys	Lys	Trp	Gln	Lys	Ser	Ile	Asn	Met	Lys	Gly	Asp	Ala	His	Pro	Leu
				325					330					335	
His	His	Asp	Thr	Ala	Ile	Leu	Leu	Thr	Arg	Lys	Asp	Leu	Cys	Ala	Ala
			340					345					350		
Met	Asn	Arg	Pro	Cys	Glu	Thr	Leu	Gly	Leu	Ser	His	Val	Ala	Gly	Met
		355					360					365			
Cys	Gln	Pro	His	Arg	Ser	Cys	Ser	Ile	Asn	Glu	Asp	Thr	Gly	Leu	Pro
		370				375					380				
Leu	Ala	Phe	Thr	Val	Ala	His	Glu	Leu	Gly	His	Ser	Phe	Gly	Ile	Gln
385					390					395					400
His	Asp	Gly	Ser	Gly	Asn	Asp	Cys	Glu	Pro	Val	Gly	Lys	Arg	Pro	Phe
				405					410					415	
Ile	Met	Ser	Pro	Gln	Leu	Leu	Tyr	Asp	Ala	Ala	Pro	Leu	Thr	Trp	Ser
			420					425					430		
Arg	Cys	Ser	Arg	Gln	Tyr	Ile	Thr	Arg	Phe	Leu	Asp	Arg	Gly	Trp	Gly
		435					440					445			
Leu	Cys	Leu	Asp	Asp	Pro	Pro	Ala	Lys	Asp	Ile	Ile	Asp	Phe	Pro	Ser
		450				455					460				
Val	Pro	Pro	Gly	Val	Leu	Tyr	Asp	Val	Ser	His	Gln	Cys	Arg	Leu	Gln
465					470					475					480
Tyr	Gly	Ala	Tyr	Ser	Ala	Phe	Cys	Glu	Asp	Met	Asp	Asn	Val	Cys	His
				485					490					495	
Thr	Leu	Trp	Cys	Ser	Val	Gly	Thr	Thr	Cys	His	Ser	Lys	Leu	Asp	Ala
			500					505					510		
Ala	Val	Asp	Gly	Thr	Arg	Cys	Gly	Glu	Asn	Lys	Trp	Cys	Leu	Ser	Gly
		515					520					525			
Glu	Cys	Val	Pro	Val	Gly	Phe	Arg	Pro	Glu	Ala	Val	Asp	Gly	Gly	Trp
		530				535					540				
Ser	Gly	Trp	Ser	Ala	Trp	Ser	Ile	Cys	Ser	Arg	Ser	Cys	Gly	Met	Gly
545					550					555					

1678



1060	1065	1070
Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser		
1075	1080	1085
Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
1090	1095	1100
Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
1105	1110	1115
Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
1125	1130	1135
Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
1140	1145	1150
Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
1155	1160	1165
Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu		
1170	1175	1180
Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro		
1185	1190	1195
Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala		
1205	1210	1215
Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
1220	1225	1230
Ser Gln Ala Gly Arg Ser Pro Pro Pro Pro Ser Glu Gln Thr Pro Gly		
1235	1240	1245
Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala		
1250	1255	1260
Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
1265	1270	1275
Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
1285	1290	1295
Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
1300	1305	1310
Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro		
1315	1320	1325
His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val		
1330	1335	1340
Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
1345	1350	1355
Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
1365	1370	1375
Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
1380	1385	1390
Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu		
1395	1400	1405
Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
1410	1415	1420
Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
1425	1430	1435
Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
1445	1450	1455
Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
1460	1465	1470
Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
1475	1480	1485
Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

1490                      1495                      1500  
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu  
 1505                      1510                      1515                      1520  
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys  
 1525                      1530                      1535  
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro  
 1540                      1545                      1550  
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn  
 1555                      1560                      1565  
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp  
 1570                      1575                      1580  
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His  
 1585                      1590                      1595                      1600  
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala  
 1605                      1610                      1615  
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu  
 1620                      1625                      1630  
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro  
 1635                      1640                      1645  
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn  
 1650                      1655                      1660  
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser  
 1665                      1670                      1675                      1680  
 Ala Pro Cys Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn  
 1685                      1690                      1695  
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu  
 1700                      1705                      1710  
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro  
 1715                      1720                      1725  
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys  
 1730                      1735                      1740  
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr  
 1745                      1750                      1755                      1760  
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg  
 1765                      1770                      1775  
 Gly His Gln Arg Val Ala Arg Arg  
 1780

&lt;210&gt; 2287

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2287

tgacacaggt tatttctctt tgggttaaata tcttacaagt ctttttttaa tcttcacttc  
 60  
 tggcctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg  
 120  
 ttgaggacat ttgtacagag tcaggtaact ggaggaactg gactacaacc ctgctcagt  
 180  
 cagccagtgt gactgagcgc ctctgagag ccagggtggat tctgdcctca aggatccatg  
 240  
 ctctggggcaa gaaaccacc catcagcagg tggcttctgc tgagccacaa caggcacaca  
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc  
 360  
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga  
 420  
 gcagcaggac aaaagcatag aggtagcact gccagtgcc a gttccaaaa taagaggctg  
 480  
 actgctacag ggtccatata ggaaaataat gggaaataca tttggacagg aggtggggtc  
 540  
 tgtaacaaag gactttaatt ccagggttaag gaatctggat gttaaaacaa cattagctgc  
 600  
 catttctaca gtgctacttc ccaggctctg tgcctttctg ggagccttga aggtttgtga  
 660  
 gctggaagga gatattagga acaaaacgat gcatgaggat agctcaggta aaggttattg  
 720  
 ataagtaaga atgcctggca ccaaacgcgt  
 750

&lt;210&gt; 2288

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2288

Met	Ala	Ala	Asn	Val	Val	Leu	Thr	Ser	Arg	Phe	Leu	Asn	Leu	Glu	Leu
1			5						10					15	
Lys	Ser	Phe	Val	Thr	Asp	Pro	Thr	Ser	Cys	Pro	Asn	Val	Phe	Pro	Ile
			20					25					30		
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
		35					40					45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
		50				55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
		115					120					125			
Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
		130				135						140			

&lt;210&gt; 2289

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2289

caggacgcgg cctcggcggg gcccgggccg aacggctgcg gacacctggg cgccgaggag  
 60  
 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcca gctggagaag  
 120  
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc  
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta  
 240  
 tcagggacac tttcacttgt tttgacacag ggctgtaaaa gaataanaag gggatactgg  
 300  
 ttcaaaaatt ggctccgac cacaagaca tccacagcag tgtttctcgg gttggaaaag  
 360  
 ccattgatga ggattcactt t  
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1			5					10					15		
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20						25					30		
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
		35					40					45			
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
		50				55					60				
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65					70					75					80
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90						95	
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcatgtctta ccgcaaagtc gggccccac cgattaaaaa tgcccgggtc gaggacagcc  
 60  
 ttcggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc  
 120  
 aagtggctga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc  
 180  
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc  
 240  
 cgatgctcgt tgacggtaag actcgccgac ccagcaacgt cggcggttgt cgtgccctca  
 300  
 tcggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa  
 360  
 gcctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgaccc caccgccttg  
 420  
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acggggttaga caggatttcc  
 480  
 tcctgccagt cccgcgctgc ccgaggcaag ctcatcccc agttgagctg ccaataccgc  
 540

cacgacagga tctcgaaaag attggggacg cgt  
573

<210> 2292

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2292

```

Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
 1             5             10             15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
      20             25             30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
      35             40             45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
      50             55             60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
      65             70             75             80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
      85             90             95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
      100            105            110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
      115            120            125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
      130            135            140

```

<210> 2293

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2293

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acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgccattg
60
gtgaacactg tcgctaagaa ctggttgaac cggctcaaca cgccggatat gaaaccact
120
gaggagatca agcggcagtt ccaaggtctg cattggttgg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctctttc
240
gaggcgaatc cgcgcatata gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgaggtg cttcggtatgc atgccttc
358

```

<210> 2294

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2294

```

Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

```

```

      1           5           10           15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20           25           30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35           40           45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50           55           60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65           70           75           80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85           90           95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100           105           110
Ala Cys Leu
      115

```

&lt;210&gt; 2295

&lt;211&gt; 546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2295

```

ggcaccgatc cgagtgggtgg tgccggggatt aggnccggatc tanaaacatt ctccgccctt
60
ggggcggtatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcgggtgatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtgggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg cggagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtg tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

&lt;210&gt; 2296

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2296

```

Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
      1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
      20           25           30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

      35      40      45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
  50      55      60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65      70      75      80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85      90      95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100      105      110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115      120      125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130      135      140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
  145      150      155      160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165      170      175
Asp Trp Leu Phe Thr Arg
      180

```

&lt;210&gt; 2297

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2297

```

gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
  60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
  120
caccccccca aaggccgaaa agcaggggcca aaaccccccg gacccccccc ggggggggca
  180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggggtct ctgggtaata
  240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
  300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaactctggg
  360
gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
  414

```

&lt;210&gt; 2298

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2298

```

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
  1      5      10      15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
      20      25      30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
      35      40      45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50  
Val Glu Met  
65

55

60

<210> 2299  
<211> 987  
<212> DNA  
<213> Homo sapiens

<400> 2299  
ngagatgtct aagttatctt ttttttcccg gaaggcaa at ggctggcgtg gaagcacaac  
60  
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120  
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360  
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420  
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540  
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660  
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720  
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780  
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840  
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900  
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987

<210> 2300  
<211> 266  
<212> PRT  
<213> Homo sapiens

<400> 2300  
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile  
1 5 10 15  
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser



<210> 2302

<211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2302  
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser  
 1 5 10 15  
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys  
 20 25 30  
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr  
 35 40 45  
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn  
 50 55 60  
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg  
 65 70 75 80  
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu  
 85 90 95  
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val  
 100 105 110  
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro  
 115 120 125  
 Gly Arg  
 130

<210> 2303  
 <211> 638  
 <212> DNA  
 <213> Homo sapiens

<400> 2303  
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 120  
 atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg  
 180  
 ctctttcttcc tgtcccgggg catcgagggc actggctcgg ccagctactc caccatcgcg  
 240  
 cccaccgtcc tgggcgacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc  
 300  
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggctcggc tgtgacgatg  
 360  
 ctgactggga actggcgctg ggccctccga gtcacgcctt gcctggaggc cgtggccttg  
 420  
 atcctgctta tcctgctggt tccagaccca ccccggggag ctgccgagac acagggggag  
 480  
 ggggcccgtg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac  
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 600  
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 638

<210> 2304

<211> 212  
 <212> PRT  
 <213> Homo sapiens

<400> 2304

Xaa	Asp	Pro	Gly	Cys	Pro	Cys	Val	Ser	Pro	Ser	Val	Phe	Val	Ser	Cys
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Leu	Leu	Leu	Ser	Ala	Pro	Val	Phe	Gly	Tyr	Leu	Gly	Asp	Arg	His	Ser
			20					25					30		
Arg	Lys	Ala	Thr	Met	Ser	Phe	Gly	Ile	Leu	Leu	Trp	Ser	Gly	Ala	Gly
		35					40					45			
Leu	Ser	Ser	Ser	Phe	Ile	Ser	Pro	Arg	Tyr	Ser	Trp	Leu	Phe	Phe	Leu
	50				55					60					
Ser	Arg	Gly	Ile	Glu	Gly	Thr	Gly	Ser	Ala	Ser	Tyr	Ser	Thr	Ile	Ala
65					70					75				80	
Pro	Thr	Val	Leu	Gly	Asp	Leu	Phe	Val	Arg	Asp	Gln	Arg	Thr	Arg	Val
			85					90					95		
Leu	Ala	Val	Phe	Tyr	Ile	Phe	Ile	Pro	Val	Gly	Ser	Gly	Leu	Gly	Tyr
		100						105					110		
Val	Leu	Gly	Ser	Ala	Val	Thr	Met	Leu	Thr	Gly	Asn	Trp	Arg	Trp	Ala
	115						120					125			
Leu	Arg	Val	Met	Pro	Cys	Leu	Glu	Ala	Val	Ala	Leu	Ile	Leu	Leu	Ile
	130					135					140				
Leu	Leu	Val	Pro	Asp	Pro	Pro	Arg	Gly	Ala	Ala	Glu	Thr	Gln	Gly	Glu
145					150					155				160	
Gly	Ala	Val	Gly	Gly	Phe	Arg	Ser	Ser	Trp	Cys	Glu	Asp	Val	Arg	Tyr
			165					170					175		
Leu	Gly	Lys	Asn	Trp	Ser	Phe	Val	Trp	Ser	Thr	Leu	Gly	Val	Thr	Ala
		180						185					190		
Met	Ala	Phe	Val	Thr	Gly	Ala	Leu	Gly	Phe	Trp	Ala	Pro	Lys	Phe	Leu
	195						200					205			
Leu	Glu	Ala	Arg												
	210														

<210> 2305  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 2305

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tcggaccagc acactttgac cgctcgtggc gcctcgtgac atgggggtaac gcgaacctcg
120
tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
180
cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca
240
cggcgtcggg ggcgcacgag ggcgatgagt tggctcgtcg tactcgcagc gctgctgccg
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ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
340

```

<210> 2306

<211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2306  
 Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn  
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 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser  
 20 25 30  
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu  
 35 40 45  
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly  
 50 55 60  
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser  
 65 70 75 80  
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys  
 85 90 95  
 Asp Asp Ala Gly Arg  
 100

<210> 2307  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 2307  
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 gccaaaggcac tgggtggggc tggcagtgagg agcaagggct cagcaggtgg cggaagcaag  
 120  
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat  
 180  
 gacagcagcc tggccctggg cgagagggcc aggaccttcg ggggattccc tgagagccct  
 240  
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttccttcc tgagccccca  
 300  
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca  
 360

<210> 2308  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 2308  
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro  
 1 5 10 15  
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys  
 20 25 30  
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser  
 35 40 45  
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu  
 50 55 60  
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

```

65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
          85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
          100          105          110
Gly Leu Pro Lys Thr Lys Glu Ala
          115          120

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<210> 2309  
 <211> 395  
 <212> DNA  
 <213> Homo sapiens

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<400> 2309
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120
tcttttccag caggcacagg gattctctcat gggggaggca gagcccaccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggg
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttgg agtctcctcc cagaccacgc
300
gactccactc aactgtgtgc tagcggactg tgtggttgat gcagccgggt cacttgagtg
360
tggttggtta tgcccacaac aggcttgccg tcacc
395

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<210> 2310  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

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<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
          20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
          35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
          50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
          85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
          100          105

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<210> 2311  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2311  
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 120  
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc  
 180  
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg  
 240  
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgtt ccttgtaacg  
 300  
 accgtcgctg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag  
 360  
 cttgtgacca tgaacgcg  
 378

<210> 2312  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2312  
 Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu  
 1 5 10 15  
 Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn  
 20 25 30  
 Asp Cys Asp Ala Leu Ala Ala Ala Asp Val Gly Ser Pro Met Gly Gly  
 35 40 45  
 Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly  
 50 55 60  
 Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met  
 65 70 75 80  
 Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Gly Leu Lys Ala Val  
 85 90 95  
 Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile  
 100 105 110  
 Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala  
 115 120 125

<210> 2313  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

<400> 2313  
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 atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct caccatcg  
 120  
 ttaagcgacg ccggtctagc tgctgaagtc accgcgcgca atgtcggtag gacagcgggg  
 180  
 ccgcttggat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca  
 240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg  
 300  
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat  
 360  
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt  
 420  
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc  
 480  
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca  
 540  
 tttaatgagg gcccgaccca cggtgacgtc attcgactgg agccccgtaa tgacgtcaca  
 600  
 ctgcactggg gcacgccta acccgcgga gtcgaaaagg acaaggacgg gaaggcagga  
 660  
 ttcacgct  
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1			5					10						15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20						25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50					55					60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
			85					90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
			100					105					110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120					125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130					135					140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150					155					160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165					170						175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185					190			
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
	195						200					205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315  
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 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgctg  
 120  
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg  
 180  
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat  
 240  
 gttgaggtcg agggtgcccc gaccgggtatt cagcaggctg tcaggtggaa ccttttccag  
 300  
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 360  
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 420  
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ccttccgcaa  
 480  
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 540  
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 546

<210> 2316  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 2316  
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 1 5 10 15  
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val  
 20 25 30  
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg  
 35 40 45  
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr  
 50 55 60  
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp  
 65 70 75 80  
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp  
 85 90 95  
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly  
 100 105 110  
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe  
 115 120 125  
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro  
 130 135 140  
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln  
 145 150 155 160  
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro  
 165 170 175  
 Trp Arg Thr Ile Thr Gly  
 180



<210> 2317  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

<400> 2317  
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 120  
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc  
 180  
 gggtcagtgc gatcagcgcg gtcgttcgag cgcttctga acgcagcccc tgctggcgca  
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 300  
 atccctcggg tcgggtgtctc gatgtgtcag cgagctcggc gatcgcattc ccgaggacct  
 360  
 cgggcagtgc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga  
 420  
 cctgctcacg ggtgagcgcg acgatgagag tgagggtggag gccgtagagg agcacgagca  
 480  
 acccagcggc acgcgt  
 496

<210> 2318  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2318  
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser  
 1 5 10 15  
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp  
 20 25 30  
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe  
 35 40 45  
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala  
 50 55 60  
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser  
 65 70 75 80  
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser  
 85 90 95  
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro  
 100 105

<210> 2319  
 <211> 1748  
 <212> DNA  
 <213> Homo sapiens

<400> 2319  
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gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact  
120  
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt  
180  
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta  
240  
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta  
300  
aaaatatttc tctaccatga tgggcttggt cgaatgggta cagagaagta cattccacct  
360  
aatgagtcca atttgaccca gttatacatg catctgacaa actactcgt gaacaagcat  
420  
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacttc catcaaatgg  
480  
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca  
540  
gaattggtgg taaagaccct gattgtagca gaacctcatg tcctgcatgc ctatcgaatg  
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780  
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct  
840  
caaaggaggc tctatggtca aaattcaatt aaaaggctct taccaggctc ctcagactgg  
900  
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgtcaa  
960  
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga  
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1080  
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1140  
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa  
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1260  
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1320  
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1380  
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc  
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gacaccgcc cattttctgc tcaacaaatg atatctgtgt cacggccaac ttctgcatct  
1560  
cggtcacatt ccttaaacce gggccttcct cctacatgag gcctctgcct cacagtaatg  
1620  
atgcctgctc taccaactct caagtgagtg agtctttgag gcaactgaaa acaaaagAAC  
1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccggtttc  
1740

caggaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
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Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35				40					45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55				60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105				110			
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
		115				120					125				
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135					140					
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185				190			
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200					205				
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210				215					220					
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235				240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250					255		
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260				265						270			
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280					285				
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290				295					300					
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305				310					315					320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330					335		
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

340 345 350  
 Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg  
 355 360 365  
 Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys  
 370 375 380  
 Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu  
 385 390 395 400  
 Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys  
 405 410 415  
 Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser  
 420 425 430  
 Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu  
 435 440 445  
 Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr  
 450 455 460  
 Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser  
 465 470 475 480  
 Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser  
 485 490 495  
 Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser  
 500 505 510  
 Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly  
 515 520 525  
 Leu Pro Pro Thr  
 530

&lt;210&gt; 2321

&lt;211&gt; 433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2321

caattgtgtg gacgtgtcta tgtgtgtttc taattctata ctatcttgaa aatgggttcag  
 60  
 cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaattgcat  
 120  
 acagggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa  
 180  
 agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga  
 240  
 attgagtgag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct  
 300  
 cagggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca  
 360  
 gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc  
 420  
 cagaggtgga gtg  
 433

&lt;210&gt; 2322

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1           5           10           15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
      20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
      35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
      50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
      85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
      100           105

```

&lt;210&gt; 2323

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

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acgcgtcaaa actggcaaaag ctggcggtt agggggagg gcaagtggac ttggaggccc
60
tcctccactg tgcaccccct tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
180
ctgccgggca cagcgncttc caggagccag ccggggagag ctgagccaag gccgaaggag
240
ccgcctcgcg gcttagccgc cccctccgc cgttgggccc cagagcggac gctgggacgc
300
ccgggtcttg gcagctctgc gcccggttag gagcggcgcg gcgagcatta gcctgcgtcc
360
tggaagaagg ggcagcgccc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga ggcgccggat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
480
gtcgggtga cttggccatc cccatccccg gccagggccc ggagggcggc cg
532

```

&lt;210&gt; 2324

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2324

```

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
      20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
      35           40           45
Pro Arg Thr

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50

<210> 2325

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2325

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<400> 2325
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60
gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat
120
ccccgcaagg gccgcattat tcccggagcc gatgctgatg tggtggtgtg ggaccagaa
180
gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag
240
aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcgct cgtgtatgag
300
aacggcgctct tcatgtgcgc cgagggcacc ggcaagttct gtccccctgag gtccctccca
360
gacactgtct acaagaagct ggtccagaga gagaagactt taaaggttag aggagtggcc
420
cgactccct acctggggga tgtcgctgtt gtcgtgcac
459

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<210> 2326

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2326

[illegible]

<210> 2327

<211> 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

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 gcctttcctg tgggaaacgc cttctcatac tatcagagca acagaggctt ccaggaagac  
 120  
 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct  
 180  
 gacttctcgg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc  
 240  
 tgtgtggggc tctggtgcct ggatgagtac tgggtactaca gcgtctttac gctatccatg  
 300  
 ctggtggcgt tcgaggcctc gctggtgcag cagcagatgc ggaacatgtc ggagatccgg  
 360  
 aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gagggccatt  
 420  
 gccagtgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca  
 480  
 gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctctgcctc tgccctgcag  
 540  
 gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgctgcga ggccgctgc  
 599

&lt;210&gt; 2328

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
1				5					10					15	
Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
	35					40					45				
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
	50				55					60					
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65				70					75					80	
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
		100						105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
	115					120					125				
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
	130				135					140					
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145				150					155					160	
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165					170				175			
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

180  
Cys Phe Cys Cys Glu Ala Ala  
195

185

190

<210> 2329  
<211> 392  
<212> DNA  
<213> Homo sapiens

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120  
atgagcacgc aaccactga ggaaccactc cgactagtgg tggcattcaa tccagtgcct  
180  
agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggt gcaggccttc  
240  
attgtcgtcg tcattgggtgg tttgttggtgg gcgttgacgg ccgacgcctt ccagttatcg  
300  
acgggtgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag  
360  
aatctgcggc tgcacgccgc tcgcaaggat cc  
392

<210> 2330  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 2330  
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe  
1 5 10 15  
Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg  
20 25 30  
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu  
35 40 45  
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp  
50 55 60  
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln  
65 70 75 80  
Asn Leu Arg Leu His Ala Ala Arg Lys Asp  
85 90

<210> 2331  
<211> 2813  
<212> DNA  
<213> Homo sapiens

<400> 2331  
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60  
gatttaaggt gcccgagtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc  
120



aaattttatc tattacaaaag aacttttaaag ttgagaatat tggacctctt cctataactg  
180  
tttcgtctct gaaaattaat ggggtataact gccaaaggta tggattcgag gtgctggatt  
240  
gggattcagt ttccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca  
300  
gactttacct cctcctgggt aattcgggac ctaagtcttg taaccgcagc ggacctagaa  
360  
tttcgcttca ctctcaatgt gactctccct catcacctgt tgcccttggtg tgcagacgtg  
420  
gttccaggac ccagctggga ggagtcattt tggaggctca cggctcttctt tgtcagtttg  
480  
tcctgttggt gtgtgatttt aatagccttc caacaagcac agtacattct catggaattc  
540  
atgaaaacaa gacagaggca aaatgctagc tcctcttcac agcaaaacaa tggtcctatg  
600  
gatgtaatca gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc  
660  
ccctctgata aaggcagggg gaagaactgc cttccagtga acactcccca aagcaggatc  
720  
cagaatgctg caaagaggag ccagccacc tatggtcatt ctcagaagaa gcacaaatgc  
780  
tcagtgtatt acagtaaaca caaaaccagc acagctgcgg ccagcagcac cagcacgact  
840  
actgaggaaa aacagacttc acccctgggc agctcactgc ctgctgctaa agaggacatt  
900  
tgcactgatg ccatgcgtga gaactggatc agcctcagat atgcaagtgg cataaatgct  
960  
aacctgcaga agaatttaac ccttcccaaa aacttactga ataaagaaga aaacacactg  
1020  
aaaaacacaa ttgttttcag taatccttct tcagaatgta gtatgaagga ggaatacag  
1080  
acatgtatgt ttcttaagga aactgacatt aaaacttcag agaacacagc tgagttcaag  
1140  
gaacgggagc tctgtccact gaagacctcc aagaaactac ctgaaaacca tttaccaaga  
1200  
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat  
1260  
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaagggtggac  
1320  
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag  
1380  
aaacaggaca tacctttcgt agagcaagaa gatccttata ggaagaaaaa gcttcaggag  
1440  
aaaagagaag gaaatttaca aaatttaaat tggagtaaaa gtcgaacatg tagaaagaac  
1500  
aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac agagtgatct aaagcttggtg  
1560  
tgcagtgact ttgagaggtc tgagctgagc agtgacatca atgtaagaag ctggtgtata  
1620  
caggaaagca ctagggagggt ttgtaaagca gatgccgaaa ttgcaagcag tttacctgct  
1680  
gccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc  
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc  
 1800  
 tgggggagct ggagcagcac cagcagctcc gacggggata agaagcccat ggtggacgcc  
 1860  
 cagcacttcc tgccggccgg agacagtgtt tcacaaaatg attttccttc tgaagctccc  
 1920  
 atctccttga atctttctca taacatctgc aatcccatga ccgtgaatag tctcccacaa  
 1980  
 tacgcagagc cttcctgtcc cagccttcct gccggggcca caggtgttga agaagataaa  
 2040  
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta  
 2100  
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc ggttcataat  
 2160  
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg  
 2220  
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgcaa tggcttcccc  
 2280  
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc  
 2340  
 ccacccaaca tgctgtgtgc ctggggacat gccagtttca tcagctctcc gccctacctc  
 2400  
 acaagcaccg gaagcttgtc tccaatgtct ggactttttg gttccatctg ggccccgcaa  
 2460  
 agcgatgtgt atgaaaattg ctgccccatc aacccccacca cggaacattc gaccacatg  
 2520  
 gaaaaccaag cggtcgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgcctat  
 2580  
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga  
 2640  
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag  
 2700  
 aggcttgtgt tttgattact agtgtaaact ggttattgag atagattatg acattggtgg  
 2760  
 atattttggc acttttatat gaaaataaat tttttaatga aaaaaaaaaa aaa  
 2813

&lt;210&gt; 2332

&lt;211&gt; 789

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5					10					15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35					40					45			
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50					55					60				
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65					70					75				80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

										85					90					95				
Asn	Asn	Gly	Pro	Met	Asp	Val	Ile	Ser	Pro	His	Ser	Tyr	Lys	Ser	Asn									
			100						105						110									
Cys	Lys	Asn	Phe	Leu	Asp	Thr	Tyr	Gly	Pro	Ser	Asp	Lys	Gly	Arg	Gly									
			115						120						125									
Lys	Asn	Cys	Leu	Pro	Val	Asn	Thr	Pro	Gln	Ser	Arg	Ile	Gln	Asn	Ala									
			130						135						140									
Ala	Lys	Arg	Ser	Pro	Ala	Thr	Tyr	Gly	His	Ser	Gln	Lys	Lys	His	Lys									
145						150						155						160						
Cys	Ser	Val	Tyr	Tyr	Ser	Lys	His	Lys	Thr	Ser	Thr	Ala	Ala	Ala	Ser									
			165						170						175									
Ser	Thr	Ser	Thr	Thr	Thr	Glu	Glu	Lys	Gln	Thr	Ser	Pro	Leu	Gly	Ser									
			180						185						190									
Ser	Leu	Pro	Ala	Ala	Lys	Glu	Asp	Ile	Cys	Thr	Asp	Ala	Met	Arg	Glu									
			195						200						205									
Asn	Trp	Ile	Ser	Leu	Arg	Tyr	Ala	Ser	Gly	Ile	Asn	Val	Asn	Leu	Gln									
			210						215						220									
Lys	Asn	Leu	Thr	Leu	Pro	Lys	Asn	Leu	Leu	Asn	Lys	Glu	Glu	Asn	Thr									
225						230						235						240						
Leu	Lys	Asn	Thr	Ile	Val	Phe	Ser	Asn	Pro	Ser	Ser	Glu	Cys	Ser	Met									
			245						250						255									
Lys	Glu	Gly	Ile	Gln	Thr	Cys	Met	Phe	Pro	Lys	Glu	Thr	Asp	Ile	Lys									
			260						265						270									
Thr	Ser	Glu	Asn	Thr	Ala	Glu	Phe	Lys	Glu	Arg	Glu	Leu	Cys	Pro	Leu									
			275						280						285									
Lys	Thr	Ser	Lys	Lys	Leu	Pro	Glu	Asn	His	Leu	Pro	Arg	Asn	Ser	Pro									
			290						295						300									
Gln	Tyr	His	Gln	Pro	Asp	Leu	Pro	Glu	Ile	Ser	Arg	Lys	Asn	Asn	Gly									
305						310						315						320						
Asn	Asn	Gln	Gln	Val	Pro	Val	Lys	Asn	Glu	Val	Asp	His	Cys	Glu	Asn									
			325						330						335									
Leu	Lys	Lys	Val	Asp	Thr	Lys	Pro	Ser	Ser	Glu	Lys	Lys	Ile	His	Lys									
			340						345						350									
Thr	Ser	Arg	Glu	Asp	Met	Phe	Ser	Glu	Lys	Gln	Asp	Ile	Pro	Phe	Val									
			355						360						365									
Glu	Gln	Glu	Asp	Pro	Tyr	Arg	Lys	Lys	Lys	Leu	Gln	Glu	Lys	Arg	Glu									
			370						375						380									
Gly	Asn	Leu	Gln	Asn	Leu	Asn	Trp	Ser	Lys	Ser	Arg	Thr	Cys	Arg	Lys									
385						390						395						400						
Asn	Lys	Lys	Arg	Gly	Val	Ala	Pro	Val	Ser	Arg	Pro	Pro	Glu	Gln	Ser									
			405						410						415									
Asp	Leu	Lys	Leu	Val	Cys	Ser	Asp	Phe	Glu	Arg	Ser	Glu	Leu	Ser	Ser									
			420						425						430									
Asp	Ile	Asn	Val	Arg	Ser	Trp	Cys	Ile	Gln	Glu	Ser	Thr	Arg	Glu	Val									
			435						440						445									
Cys	Lys	Ala	Asp	Ala	Glu	Ile	Ala	Ser	Ser	Leu	Pro	Ala	Ala	Gln	Arg									
			450						455						460									
Glu	Ala	Gly	Tyr	Tyr	Gln	Lys	Pro	Glu	Lys	Lys	Cys	Val	Asp	Lys	Phe									
465						470						475						480						
Cys																								

515 520 525  
 Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu  
 530 535 540  
 Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro  
 545 550 555 560  
 Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly  
 565 570 575  
 Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr  
 580 585 590  
 Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly  
 595 600 605  
 Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile  
 610 615 620  
 Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro  
 625 630 635 640  
 Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr  
 645 650 655  
 Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp  
 660 665 670  
 His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala  
 675 680 685  
 Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr  
 690 695 700  
 Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro  
 705 710 715 720  
 Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu  
 725 730 735  
 His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr  
 740 745 750  
 Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr  
 755 760 765  
 Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser  
 770 775 780  
 Tyr Cys Gly Asn Val  
 785

&lt;210&gt; 2333

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc  
 60  
 gaagtaataa atatgaatgg ggtgtatcat ataatagaaca acgaatatcc atatagtgc  
 120  
 gacgaagtcc ttcacaaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta  
 180  
 aaaagctatc atattgctta tgaagcacat aaaggctcagt tccgaaaaaa cggattacca  
 240  
 tacattatgc atcctataca agttgcagggt attttaacag aaatgctgatt agacggaccg  
 300  
 acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat  
 360

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa  
 420  
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt  
 480  
 gcgattgccca aagatgtacg c  
 501

<210> 2334  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2334  
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala  
 1 5 10 15  
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr  
 20 25 30  
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly  
 35 40 45  
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val  
 50 55 60  
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala  
 65 70 75 80  
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp  
 85 90 95  
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val  
 100 105 110  
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala  
 115 120 125  
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg  
 130 135 140

<210> 2335  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2335  
 ggatcctgag cgtggggact tctttgcact ccacagaacc ctcacttgta cctctacttt  
 60  
 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac  
 120  
 cccatgggccc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc  
 180  
 accgcctgc agttggaaca ggaggctgag agcttttaggg agctggaggc ccctgcccag  
 240  
 ggcagcccac ccagccctgg tgaggaggcc ctggtcctta ctttcccact ggccaagccc  
 300  
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca  
 360  
 gcatcttcat cagcatcggg cactagt  
 387

<210> 2336

<211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2336  
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu  
 1 5 10 15  
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His  
 20 25 30  
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser  
 35 40 45  
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly  
 50 55 60  
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn  
 65 70 75 80  
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser  
 85 90 95  
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser  
 100 105

<210> 2337  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 2337  
 ngagaagagg aggagtcac gccaggggcc gccatctcca ggccctcgcca agccgctggg  
 60  
 accatgtgca gctcaagaat gccctccggc ccatcgccct cggggcaggg gaagggcagc  
 120  
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag  
 180  
 ggggtcaatgc caggcacctt gctattgagg aacctatcca ggaggaagga ctcgggcaga  
 240  
 cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg  
 300  
 ctgaggtccg tgggcaggcg ggctggggcc aacgtggggg caccgacctc ctcaaagct  
 359

<210> 2338  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2338  
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly  
 1 5 10 15  
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His  
 20 25 30  
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu  
 35 40 45  
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser  
 50 55 60  
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

65                      70                      75                      80  
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser  
                        85                      90                      95  
Ser Lys

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<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
```

```

<400> 2339
acgcgtggcg tcagtcacagg cagacttggg aggtcgccta caccgtcaac tcggttgcca
60
ccctgtcctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc
120
actgggtcccg gtagggcttg taatgctggg gcgctcggcg cgatgtgcca gttccttggt
180
gagttactcc tctacactgg tgtgaacaag accggagaat tcccccccat attctcgttt
240
cccgtcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgcctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggt gagcgagcgg
360
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggcccttcgtg
420
ttgtcggggg gcggtgctg
439

```

```
<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
```

```

<400> 2340
Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys
  1                    5                      10             15
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg
    20                    25                      30
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala
    35                    40                      45
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
    50                    55                      60
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
    65                    70                      75             80
Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala
          85                      90

```

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<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
```

<400> 2341

gccaaacctc cctccatcc tgccaagat ggatcttgct gagcctccct ggcataatgcc  
 60  
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag  
 120  
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctcctgtgag cgggtcccca  
 180  
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag  
 240  
 agtcctgggg ccaccggca caggcaggag gattctggag accaggccac atcaggcnat  
 300  
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt  
 360  
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n.  
 411

&lt;210&gt; 2342

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1				5					10					15	
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
		35					40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50					55					60				
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75				80		
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90					95		
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105					110		

Leu

&lt;210&gt; 2343

&lt;211&gt; 522

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2343

ggcccgagc agatgctgat gccttcacag tttccaacc agggccagca gggattctct  
 60  
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc  
 120  
 agccctgata agagctcaat gccatgagc aacgtgggca ccaccggct cagccacatg  
 180  
 cctctgcccc ctgcgtccaa tctcctggg accgtgcatt cagccccaaa ccgggggcta  
 240  
 ggcaggcggc cttcggacct caccatcagt attaatcaga tgggctcacc gggcatgggg  
 300



cacttgaagt cgccaccct tagccagggtg cactcacccc tggtcacctc gccctctgcc  
 360  
 aacctcaagt caccacagac tcctcacag atggtgcctt tgccttctgc caaccgcca  
 420  
 ggacctctca agtcgcccc ggtcctcggc tcctccctca gtgtccgttc acccactggc  
 480  
 tcgcccagca ggctcaagtc tcctccatg gcggtgcctt ct  
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
1				5					10					15	
Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
			20					25					30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
		35					40					45			
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
		50				55					60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65					70					75				80	
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
			85						90				95		
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
			100					105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
		115					120					125			
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
		130				135					140				
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145					150					155				160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
				165					170						

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

nagatctccg tcttgatctt gagcaccgag gcactggggg gggaggacag cagccgcggg  
 60  
 ggctccacc agcccgctc caggccgctt gggctcgacg cgctggacag ggcgcggcgg  
 120  
 ctggcgctgc cgcccttttg cggtttccgc cttttcttgc gcttctggtg cttgctggag  
 180  
 gctgcgcgc cgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtgc  
 240  
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat  
 300

gcaaataaaa agaataatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac  
 360  
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag  
 420  
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac  
 480  
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc  
 540  
 ggaagaagtc gggcaacgcg t  
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa	Ile	Ser	Val	Leu	Ile	Leu	Ser	Thr	Glu	Ala	Leu	Gly	Gly	Glu	Asp
1				5					10					15	
Ser	Ser	Arg	Gly	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu
			20					25					30		
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
			35				40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
			50			55					60				
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65				70						75				80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90					95		
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
			100					105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
			115				120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
			130			135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150					155					160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
			165					170						175	
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

atcagcgaag aacacggcag gaccctggaa gacgccgcgc gtgaattgaa gcgtgggtatc  
 60  
 gagaacgtcg agtacgcctg cgccgcgcgc gaagtactga aggggtgaata cagccgtaac  
 120  
 gtcgggtccga acatcgacgc ctgggtccgat ttccagccgc tgggcgtggg ggcgggggac  
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc  
 240  
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc  
 300  
 cagctgttgc aggaagccgg ttgccccaaa ggtgtgctga acgtggtgca tggtgacaag  
 360  
 accgcggtgg acgcg  
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5				10						15	
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
		20					25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
	35					40					45				
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50				55					60					
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85				90						95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
		100					105						110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

nnnaaaaaaaaa aaaaaaaaaa aaaaacacaa tatttaaatgg acgcggttta ttcagcaggt  
 60  
 gctgacaaag tttttggtgt cccaggagat ttaaatctag cctttttaga tgatattatt  
 120  
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct  
 180  
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa  
 240  
 ttaagtgtctg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc  
 300  
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttcccttggc  
 360  
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct  
 417

<210> 2350

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2350

Xaa	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Thr	Gln	Tyr	Leu	Met	Asp	Ala	Val
1				5					10					15	
Tyr	Ser	Ala	Gly	Ala	Asp	Lys	Val	Phe	Gly	Val	Pro	Gly	Asp	Phe	Asn
		20						25					30		
Leu	Ala	Phe	Leu	Asp	Asp	Ile	Ile	Ala	His	Asn	His	Ile	Lys	Trp	Ile
		35				40						45			
Gly	Asn	Thr	Asn	Glu	Leu	Asn	Ala	Ser	Tyr	Ala	Ala	Asp	Gly	Tyr	Ala
	50					55					60				
Arg	Ile	Asn	Gly	Ile	Gly	Ala	Met	Val	Thr	Thr	Phe	Gly	Val	Gly	Glu
65				70						75				80	
Leu	Ser	Ala	Val	Asn	Gly	Ile	Ala	Gly	Ser	Tyr	Ala	Glu	Arg	Val	Pro
				85					90					95	
Val	Ile	Ala	Ile	Thr	Gly	Ala	Pro	Thr	Arg	Ala	Val	Glu	Gln	Glu	Gly
		100						105					110		
Lys	Tyr	Val	His	His	Ser	Leu	Gly	Glu	Gly	Thr	Phe	Asp	Asp	Tyr	Arg
		115					120					125			
Lys	Met	Phe	Glu	Pro	Ile	Thr	Thr	Ala	Gln	Ala					
		130					135								

<210> 2351  
 <211> 696  
 <212> DNA  
 <213> Homo sapiens

<400> 2351

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naccgcttgc cgcgcgataa ctctgggtgag ggtcttgctg gggccctgct ggcccttgtt
60
ggctccgccc agctgtgcca ccgttctctg atcaccgacc agtatgaccg gttcgtgcgt
120
ggcaataactg tgctcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc
180
ggcatcgcg cgtccttgga cgctaacgga cgccagacca cccttaacct gtatcttgge
240
gcccagctgg ctctttgcca ggcttaccgg aatgtggctg tctctggcgc aactccggtg
300
gctgtcactg attgcctcaa ttatggctcc ccgtacgata ccgatgtcat gtggcaattc
360
gacgagacca tccttgggtc ggttgacggc tgccgcgagc ttggcgtgcc ggttacgggc
420
ggtaacggtt ccctgcacaa ccgcactgga gatgagtcga ttcggcctac tccgctcgtt
480
ggtgtgctcg gcgttattga tgacgtgcat cgtcgcatcc cgtcggcctt cgcacacgac
540
ggcgacgctg tcttctgctg aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
600
gacgtcatcc acgtggcca cctaggcggt atgccccga tgcccgacct gaatgccgag
660
aaggccctgg ccgcggtgat ggtggaagcg tcgaag
696

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<210> 2352  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

<400> 2352  
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu  
 1 5 10 15  
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr  
 20 25 30  
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro  
 35 40 45  
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu  
 50 55 60  
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly  
 65 70 75 80  
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly  
 85 90 95  
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr  
 100 105 110  
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val  
 115 120 125  
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser  
 130 135 140  
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val  
 145 150 155 160  
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala  
 165 170 175  
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys  
 180 185 190  
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu  
 195 200 205  
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala  
 210 215 220  
 Ala Val Met Val Glu Ala Ser Lys  
 225 230

<210> 2353  
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 <213> Homo sapiens

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 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr  
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 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe  
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&lt;211&gt; 1000

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr  
 35 40 45  
 Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu  
 50 55 60  
 Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg  
 65 70 75 80  
 Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met  
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 115 120 125  
 Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn  
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 Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys  
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 Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln  
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 Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro  
 225 230 235 240  
 Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu  
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 Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His  
 260 265 270  
 Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser  
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 Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp  
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 Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg  
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 Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys  
 355 360 365  
 Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln  
 370 375 380  
 Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu  
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 Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr  
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 Ser Arg Glu Asp Arg Leu Ala Ser Ile Tyr Glu Glu Val Glu Asn Asn  
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 Val Pro Glu Thr Ile Ala Leu Leu Thr Leu Ala Asn Ile Lys Ile Trp  
 465 470 475 480  
 Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Val Asn Ile Gly Tyr Ser  
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 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly  
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 His Thr Val Leu Glu Val Arg Glu Glu Xaa Gln Glu Ser Pro Gly Glu  
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 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu  
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 740 745 750  
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 785 790 795 800  
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&lt;210&gt; 2357

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2357

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&lt;210&gt; 2358

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2358

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                     20                      25                      30  
 Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu  
                     35                      40                      45  
 Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
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 <212> DNA  
 <213> Homo sapiens

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<210> 2360  
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 <212> PRT  
 <213> Homo sapiens

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Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35      40      45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
      50      55      60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65      70      75      80
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      85      90      95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
      100      105

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<210> 2361  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 2361

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 398

&lt;210&gt; 2362

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2362

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Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
	35					40						45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
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Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70				75					80	
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Arg Phe

&lt;210&gt; 2363

&lt;211&gt; 833

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2363

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 180  
 tcccctgatg tgctggcctc cgtttccatc gcttccctcat ggcttcttc cgcccggtgt  
 240  
 tccaagccca ctgcangtcg aagcaaactg gattgcgtta ccactcagaa ggtggcacag  
 300  
 ggactggcag cggtgccatc tgggagctctg tgtgctcagc ctccgagtgc aggtttcccc  
 360

ggccctgct gtggtgctag gtcccagat gagagatcac ggtcatgaag atcagcccc  
 420  
 aaggcagccc cttccnttcc agcctgggct ctggcgtgtt ctaggtgctc acttccatgg  
 480  
 ctggcctgct cacagagccc tacctcagcc tgtggttaagc gcacctgctc ggccctgggtg  
 540  
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgaggggacg  
 600  
 aaacacgggtg gccctgctcc tagtgctgtg gcacgccacg etccacacct gccatctgcc  
 660  
 cttccaccac ctgctccccc aggggctcctg cctcgtgact cacgctcagg caagtctccg  
 720  
 ggcgcgaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aacctatagg  
 780  
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt  
 833

&lt;210&gt; 2364

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2364

Xaa	Thr	Pro	Leu	Ala	Pro	Asn	Ala	Lys	Ala	Phe	Lys	Asp	Ala	Ala	Gln
1				5				10					15		
Lys	His	His	Gln	Gln	His	Lys	Gly	Arg	Ser	Gln	Glu	Pro	Glu	Leu	Thr
		20					25					30			
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
	35					40					45				
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50				55			60							
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65				70				75					80		
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
			85					90					95		
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
		100					105					110			
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
	115					120						125			
Pro	Asp	Glu	Arg	Ser	Arg	Ser									
	130					135									

&lt;210&gt; 2365

&lt;211&gt; 429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2365

accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt  
 60  
 ctcctgctcagt tcgcccacaac acctctgaac gaagtcaaga ttctccggca ctggagccaa  
 120  
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg  
 180

```
<210> 2366
<211> 132
<212> PRT
<213> Homo sapiens
```

```
<210> 2367
<211> 474
<212> DNA
<213> Homo sapiens
```

1726



tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt  
 420  
 gcgacggcag ctctcgtcgc atggacatgc tcgtcgtcgg tgcgggaac gcgt  
 474

<210> 2368  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2368  
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly  
 1 5 10 15  
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala  
 20 25 30  
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser  
 35 40 45  
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile  
 50 55 60  
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu  
 65 70 75 80  
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr  
 85 90 95  
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro  
 100 105 110  
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp  
 115 120 125  
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala  
 130 135 140  
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg  
 145 150 155

<210> 2369  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 2369  
 ctgaatggca ggcaggcaga ggccaccaga gccagcccc cgagaagccc tgctgagcca  
 60  
 aaggggagcg ccctgggacc taaccagag ccccatctca ccttcccccg ttctttcaaa  
 120  
 gtgcctcccc caacccagc caggacttcg tccatcccag ttcaggaagc acaagaggct  
 180  
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct  
 240  
 tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagcnc agactgcct  
 300  
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca  
 360  
 gatgaacgag ctgggactcc gcctccagcc cctccccctgc cccctcct  
 408

<210> 2370

<211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2370  
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser  
 1 5 10 15  
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His  
 20 25 30  
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg  
 35 40 45  
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys  
 50 55 60  
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala  
 65 70 75 80  
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser  
 85 90 95  
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg  
 100 105 110  
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro  
 115 120 125  
 Pro Ala Pro Pro Leu Pro Pro Pro  
 130 135

<210> 2371  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2371  
 gaattcggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcggtg  
 60  
 agaggggttg cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga  
 120  
 ggcaggcact agtcatgagg caagagatgc ctcaagaagag gatgctggcc gcagggcaca  
 180  
 gcagagaggg agatagcccc gggcactcct caggaccggg cctcagggga cagcaaaca  
 240  
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt  
 300  
 caggcgggccc aagggttttca tgcagcn  
 327

<210> 2372  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2372  
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu  
 1 5 10 15  
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile  
 20 25 30  
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
      65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

&lt;210&gt; 2373

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2373

```

gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgcttttgct tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

&lt;210&gt; 2374

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2374

```

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
      1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50              55              60
Asn Glu Asn Met Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
      65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

```

      85          90          95
Pro Asp Ser Cys Glu Met Asn Pro Asn Thr Gln Met Thr Gly Asn Gln
      100          105          110
Leu Asn Leu Lys Asn Met Glu Thr Pro Ser Thr Ser Asn Val Ser Gly
      115          120          125
Arg Val Leu Asp Asn Ser Phe Cys Ser Gly Gln Glu Ser Ser Thr Lys
      130          135          140
Gly Met Pro Ala Lys Ser Asp Ser Ser Cys Ser Met Glu Val Leu Ala
145          150          155          160
Thr Cys Leu Ser Leu Trp Lys
      165

```

<210> 2375  
 <211> 535  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2375
ntggccatgt cggtgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
60
ctggacgcga tgcgcgatgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgccgc gcggggcaat gccacgcgg tacgcgggcg gatcaccgcc
180
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccgggggc
240
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcgttc gcacctgttc
300
cgcggggcaa cctcgggcac catcatgcgc aacgacgctt accggtttat tcgctggggc
360
acgtttgtcg agcgcgcgga caacaccctg cgctgctgg atgcgcgcta cgaaatgttt
420
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
480
ctgctgcggg ccttgctcgc attcgaggcg tataccgaac tgtaccccaa cgcgt
535

```

<210> 2376  
 <211> 178  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2376
Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
1      5      10      15
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
20     25     30
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
35     40     45
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
50     55     60
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
65     70     75     80
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg

```

```

      85              90              95
Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp
      100              105              110
Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn
      115              120              125
Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser
      130              135              140
Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala
      145              150              155              160
Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro
      165              170              175
Asn Ala

```

&lt;210&gt; 2377

&lt;211&gt; 622

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2377

```

acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccagg agatgaaagg aaccaatcct ggggtggtcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatag ttcctatcta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcctaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

```

&lt;210&gt; 2378

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2378

```

Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
  1              5              10              15
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
      20              25              30
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

```

          35          40          45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
          50          55          60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65          70          75          80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
          85          90          95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
          100          105

```

&lt;210&gt; 2379

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgtcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag cagggaaagt gtgcagcagt ggggagaaaag ca
342

```

&lt;210&gt; 2380

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
1          5          10          15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
          20          25          30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
          35          40          45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
          50          55          60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65          70          75          80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
          85          90          95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
          100          105          110
Ser

```

&lt;210&gt; 2381

&lt;211&gt; 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc  
 60  
 ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg  
 120  
 ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat  
 180  
 ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggtt gacgggggca  
 240  
 ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca  
 300  
 ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc  
 360  
 ccggagctga ccgcctcgtg aagaggctgt caggctcatgt acccatcgct gtgggtgtcga  
 420  
 attccccgac gcgt  
 434

&lt;210&gt; 2382

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2382

Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp  
 1 5 10 15  
 Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser  
 20 25 30  
 Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val  
 35 40 45  
 Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His  
 50 55 60  
 Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu  
 65 70 75 80  
 Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg  
 85 90 95  
 Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn  
 100 105 110  
 Ser Pro Thr Arg  
 115

&lt;210&gt; 2383

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggc cgcttcggca ggcattggatt  
 60  
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gggggtgggg  
 120

cagaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac  
 180  
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc  
 240  
 gatgtcggca cgaaaaatta aatgcactga atgcggggtg tcgcacagga tgcattctcg  
 300  
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaacacct tgtgattttt  
 360  
 ggcgagtgcc aacatgggtat gtgtatgccg ctg  
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1				5					10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
			35				40					45			
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
	50				55					60					
Asp	Val	Arg	Cys	Val	Asp	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu
65				70					75					80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
			85					90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100				105						110		
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
			115				120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat  
 60  
 gcaactgtgct gtggactctt gttgtggggc cctaggtctg ccagcattt tggggttcac  
 120  
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggc  
 180  
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc  
 240  
 caagaccct caagtttctg tgtcctgacc ccaagcatag gcctgagtg cctctggggc  
 300  
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt  
 347

<210> 2386



<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2386  
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu  
 1 5 10 15  
 Cys Cys Gly Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly  
 20 25 30  
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val  
 35 40 45  
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met  
 50 55 60  
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe  
 65 70 75 80  
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly  
 85 90 95  
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu  
 100 105

<210> 2387  
 <211> 715  
 <212> DNA  
 <213> Homo sapiens

<400> 2387  
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg  
 60  
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc  
 120  
 cgctacctgc ggcctgtgtg ctcccaccac ggggcaccga cccgggcgcg ccccgggccc  
 180  
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgcct ctgtggggga  
 240  
 gctcaccccc tccactcgca cagtgcgctg cgggccgggg tgtgggaggt cccgggactt  
 300  
 gggttgtgag tgcctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg  
 360  
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca  
 420  
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg  
 480  
 tgtgctgtg tgtccgtatt tgagtgttta caggaatgtg ggtggtgagt acccgtatgt  
 540  
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta  
 600  
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt  
 660  
 gtttgaggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag  
 715

<210> 2388  
 <211> 58  
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
 20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
 35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
 50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtag cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagtccatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataaacag
240
ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgac acaaattggcc cggccacacc acccgn
336

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<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
 20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
 35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
 50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
 65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
 85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
100           105           110

```

<210> 2391

<211> 388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

gtcgactaac ctgctacag ccgccaccct acgttttagtc gcgaagcgtg tcggctccat  
 60  
 gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcga  
 120  
 aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttccact  
 180  
 gcgtcaacga agacctgagt ttccaagacg cctgctcta caccgccagc ctgctcgaca  
 240  
 gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga  
 300  
 tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg  
 360  
 agtgcctgac cgcaccaaag ccctgcct  
 388

&lt;210&gt; 2392

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2392

Mét	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
			35				40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
			50			55					60				
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65					70					75				80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
				85					90					95	
Thr	Ala	Pro	Lys	Pro	Cys										
				100											

&lt;210&gt; 2393

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgtc tgagtccggc  
 60  
 atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg  
 120  
 tgcgcccgt tccgcatetc cggcctgccg gtggtagacg aggacggcac cctgatgggc  
 180  
 atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggc cagcgaggct  
 240

atgacggcta tgccgcttgt tgttgcgcg cagggtgtat ctaagaagga agccctcgaa  
 300  
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgaggataa taagctcacc  
 360  
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g  
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10						15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
		50				55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70					75				80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85					90						95	
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
		115				120						125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
		130				135									

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac ttagtcata  
 60  
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac  
 120  
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca  
 180  
 atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat  
 240  
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcaact  
 300  
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc  
 360  
 gt  
 362

<210> 2396

<211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 2396  
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro  
 1 5 10 15  
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His  
 20 25 30  
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys  
 35 40 45  
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu  
 50 55 60  
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val  
 65 70 75 80  
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His  
 85 90 95  
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala  
 100 105 110  
 Asn Ser Ser Glu Ser  
 115

<210> 2397  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2397  
 nacagcacac tccgectcct ccgacgatca tagctttcac gtcggacatg atcccccgcc  
 60  
 tagtgtacta ctggctcctc tccgtccctc cctacgggga ccacacttcc tacaccatgg  
 120  
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca  
 180  
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat  
 240  
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag  
 300  
 ccaagctggc ttttatcatt gtcatggagc acgtcatcta ctctgtgaaa tttttcattt  
 360  
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc  
 420  
 taacccaaaa gctttctcat gagaatcac  
 449

<210> 2398  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 2398  
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro  
 1 5 10 15  
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

20 25 30  
 Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val  
 35 40 45  
 Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr  
 50 55 60  
 Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met  
 65 70 75

<210> 2399  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 2399  
 acgcgtcatg cttcacgaaa cgggtcacgc gtttcattac caagcagctg gcaaacacaa  
 60  
 cttgtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca  
 120  
 gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact  
 180  
 agtcaaacc tttgctggtc cggccaggct tggaggggtt cgaaaaccta caacgccaca  
 240  
 aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat  
 300  
 accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc  
 344

<210> 2400  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 2400  
 Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys  
 1 5 10 15  
 His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe  
 20 25 30  
 Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser  
 35 40 45  
 Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly  
 50 55 60  
 Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly  
 65 70 75 80  
 Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn  
 85 90 95  
 Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly  
 100 105 110

<210> 2401  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc  
 60  
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat  
 120  
 gactttgagt ttctctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc  
 180  
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg  
 240  
 gctacttccc tcgagctcac aggcgacgac ggcggctggg ggtcattttt caccaacctc  
 300  
 gtggacaagt acggcgagcgt cccggccgag gtcatgcctg aggtgcactc gtccggccac  
 360  
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgcgcgca ccgtgcggtg  
 420  
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt  
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35				40					45				
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50				55					60					
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65				70					75				80		
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90					95		
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100				105						110			
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
	115					120						125			
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130				135						140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145				150						155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcatgaacg gcgataaccc gctggactcg tctgcggttc acccggaagc ctaccgcgtg  
 60  
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg  
 120

ttectcaagc gcttgaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc  
 180  
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc  
 240  
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa  
 300  
 ggcggtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac  
 360  
 ggtttggtgc acatctctgc acttttcg  
 387

<210> 2404  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2404  
 Xaa Met Asn Gly Asp Asn Pro Leu Asp Ser Ser Ala Val His Pro Glu  
 1 5 10 15  
 Ala Tyr Pro Leu Val Gln Arg Ile Ala Ala Glu Thr Gly Arg Asp Ile  
 20 25 30  
 Arg Ser Leu Ile Gly Asp Ala Ala Phe Leu Lys Arg Leu Asp Pro Lys  
 35 40 45  
 Lys Tyr Thr Asp Glu Thr Phe Gly Val Pro Thr Ile Thr Asp Ile Leu  
 50 55 60  
 Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr  
 65 70 75 80  
 Ala Glu Phe Gln Asp Gly Val Glu Asp Leu Lys Asp Leu Gln Pro Gly  
 85 90 95  
 Met Ile Leu Glu Gly Val Val Thr Asn Val Thr Asn Phe Gly Ala Phe  
 100 105 110  
 Val Asp Ile Gly Val His Gln Asp Gly Leu Val His Ile Ser Ala Leu  
 115 120 125  
 Ser

<210> 2405  
 <211> 859  
 <212> DNA  
 <213> Homo sapiens

<400> 2405  
 ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc  
 60  
 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt  
 120  
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag  
 180  
 ccttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca  
 240  
 gcaatcctgg taccaacgaa tggctcacca ccaccacccc caatgcccag accgcagacc  
 300  
 tgcattcctc ccatctcaca gcccacaaac caaacggtta ttcattctac ctcccatcct  
 360



actcctcacg aattttcttcc accgtagact ctggttaatt ggactgactg aagcccaggg  
 420  
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc  
 480  
 ctgctatagg ctcgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg  
 540  
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg  
 600  
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg  
 660  
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggacat ggcttctacc  
 720  
 tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc  
 780  
 agttcactga agggcagacc tgggatcata cagggagcaa ggaagcttga gccccttcag  
 840  
 gagaagggga agaacgcgt  
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1			5					10					15		
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20				25					30			
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35				40					45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55				60					
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70				75					80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85				90						95		
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100				105					110			
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115				120					125				
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggt ttatcttcag catggtgatc gcgattggtt tagccgttat ggctgcggtc  
 60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg  
 120  
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcgtt  
 180  
 atcccggtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg  
 240  
 ccgcagacgt ccgcggcaaa gtggatcggg cactacttca cgcgcgggtga ccatccgggtg  
 300  
 tac  
 303

<210> 2408

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2408

Xaa	Ala	Trp	Phe	Ile	Phe	Ser	Met	Val	Ile	Ala	Ile	Gly	Leu	Ala	Val
1			5					10					15		
Met	Ala	Ala	Val	Val	Phe	Ile	Glu	Gln	Gly	Gln	Arg	Arg	Ile	Pro	Val
		20					25						30		
Gln	Tyr	Ala	Lys	Arg	Met	Val	Gly	Arg	Arg	Met	Phe	Gly	Gly	Ser	Thr
	35					40					45				
Thr	Tyr	Ile	Pro	Leu	Lys	Val	Asn	Gln	Ser	Gly	Val	Ile	Pro	Val	Ile
	50				55					60					
Phe	Ala	Ser	Ser	Ile	Leu	Tyr	Leu	Pro	Val	Leu	Tyr	Ala	Thr	Phe	Arg
65				70				75					80		
Pro	Gln	Thr	Ser	Ala	Ala	Lys	Trp	Ile	Gly	His	Tyr	Phe	Thr	Arg	Gly
			85					90					95		
Asp	His	Pro	Val	Tyr											
			100												

<210> 2409

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2409

ccatggtttc aagcccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca  
 60  
 cctcccgccc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt  
 120  
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc  
 180  
 tcggcccggac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg  
 240  
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga  
 300  
 gggacatgag tgtcagtgtg gg  
 322

<210> 2410

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2410

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Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1             5             10             15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20             25             30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
      35             40             45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
      50             55             60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65             70             75             80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85             90             95
Asp Leu Val Arg Asp Met Ser Val Ser Val
          100             105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

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ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagga gacagagga gctgtgagag ccctgaggct gagggtttt
120
ctggggaagc accatcccta gggacctccg cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtgg catgcacgtc gctgaaaggg
300
aggcctgggc ccgaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtcg
360
gggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1             5             10             15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20             25             30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
      35             40             45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
      50             55             60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

65          70          75          80
Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val
          85          90          95
Ala Glu Arg Gln Ala Trp Ala Arg Gly Leu Gly Val Gly Thr Pro Glu
          100          105          110
Glu Thr Val Gln Cys Gly Val Gly Gly Ala Ala
          115          120

```

&lt;210&gt; 2413

&lt;211&gt; 784

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2413

```

ccccggagag ttgggcgggg caggggtgtt catggcatatc tcgggattgt gtcatttggg
60
gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggtctact gaggaattgg ggttcttcct gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
ggctgaggtg agctcttccc atggagtgca tccttcctga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggcctggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctcgggggac ctgagagtaa gttacagact tcatgaccct tcaccccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

&lt;210&gt; 2414

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2414

```

Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
  1          5          10          15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
          20          25          30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

```

```

      35              40              45
His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu
      50              55              60
Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu
65      70      75      80
Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val
      85              90              95
Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly
      100             105             110
Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His
      115             120             125
Gly Lys Ser Ser Pro Gln Pro Pro Val
      130             135

```

&lt;210&gt; 2415

&lt;211&gt; 2164

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2415

```

ctcgtgccag cgctcctcgcg ggtctgaatg gaagggtcga ggtcgtcgtc ggcggcgagc
60
agatcctgaa gccagaactc caccgccggcg cccgcgccat gcggcgggag aggtgcggcg
120
ccccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttegggtctt cgctgcggag
180
atcatggacg cttttgatcg ctggcccaca gacaaggagc tggtaggcca ggctaaagca
240
ctaggccggg agtacgtgca cgcgcggctt ttgcgcgccg gcctctcctg gagcgtcca
300
gagcgtgcct cgctgcccc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
360
ctgggcatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
420
cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcctggccgt ggctggccac
480
atcttctctg caggcatcac gtggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
540
ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgcctt cgtggactgc
600
ctgggggagt tcgtgcgcaa gacctggca acctggctgc ggagacgcgg cggatggact
660
gatgtctca agtgtgtggt cagcacagac cctggcctcc gctccactg gctggtggct
720
gcactctgca gcttcggccg ctctctgaag gctgccttct tcgtgctgct gccagagaga
780
tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggccct
840
cagcacccga acacatcttc ctctcccca cccgagcctg gagcactcta acctcggaga
900
ccccctaagc cccgttcctc cgcagaccca ggccctccgg aagggtgagt ggggaggggg
960
tttctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
1020

```

ctctgtgat ctctgtgtt tcccttttct ttctggggcc aggaagtcag ggtcaactcc  
 1080  
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc  
 1140  
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca  
 1200  
 cctgagcccc tggggaaggg gcccgaaca cctgctctca cctgagcccc aggtgaaggg  
 1260  
 gcccgaaca cctgctctca cctgagcccc aggtgaaggg gcccgaaca cctgctctca  
 1320  
 cctgagcccc aggtgaaggg gcccgggaac acctctcacc tgaaccggg ggtcccatcc  
 1380  
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag  
 1440  
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt  
 1500  
 aagggttcaca tgctggttgc ttaatccgtt tctggaggaa gagtatgaca cccacttggt  
 1560  
 atggggctct tgtagcgttg ggaccggggc cggcgggctc caggccagca cacctaacc  
 1620  
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt  
 1680  
 cagtggaggg tgagggtgac cccatctgct atttttgtgc tcatcctcat acaaccatt  
 1740  
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 1800  
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattct  
 1860  
 tcctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca  
 1920  
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacc acctgagccc  
 1980  
 tcccgccag gcttcgtgct ggggtgggac atgtgccagg acaggagggg cccggcgga  
 2040  
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtataaaa  
 2100  
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 2160  
 aaaa  
 2164

&lt;210&gt; 2416

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5				10					15		
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25					30		
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35					40					45			
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

```

      50              55              60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met
65              70              75              80
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser
      85              90              95
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly
      100              105              110
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
      115              120              125
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro
      130              135              140
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys
145              150              155              160
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu
      165              170              175
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
      180              185              190
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val
      195              200              205
Leu Leu Pro Glu Arg
      210

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&lt;210&gt; 2417

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2417

```

nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta
60
aagctgattt gattttcata ttgatacctc aatagttaag tgaaggacta gttattgctc
120
cagttgtagt ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggagaa
360
aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt
540
gctggcgag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattgtt ttcatt
615

```

&lt;210&gt; 2418

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
      20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
      35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
      50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
      85           90           95
Tyr Tyr Cys Phe His
      100

```

&lt;210&gt; 2419

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2419

```

aaattttcag aagtcctggg gttgcgcggg caaacaggga ccgaggaggg acgaccgcct
60
ccccgtgacg ctgcttcttc ttctgcctg cagctgaggg gtctgttttg tgcgcttcc
120
gctccttctt cacgtacaca gggggcagct tagcctcttg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

```

&lt;210&gt; 2420

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
      20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
      35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
      50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```



85 90 95

Lys Ile

<210> 2421  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

<400> 2421  
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 60  
 tactggttgt ttgacagtgc agggcttgtg cacagacgtg agccacaggg cagcacaacg  
 120  
 ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg  
 180  
 ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc  
 240  
 gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg  
 300  
 gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagtttaa ataccggcg  
 360  
 ggtattagcg tagtgcgttc aattcgtaaa aagttccccc acgctggagt gtgctcgcca  
 420

<210> 2422  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 2422  
 Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln  
 1 5 10 15  
 Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala  
 20 25 30  
 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys  
 35 40 45  
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala  
 50 55 60  
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg  
 65 70 75 80  
 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg  
 85 90

<210> 2423  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

<400> 2423  
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 60  
 gagctcaacg ccaagcacao gaagatattg gaaggtcttc tacggcatcc tgagaataga  
 120

gaatgcgcag actgcaagtc aaagggctcct cgatgggcaa gtgtgaatct aggtatcttt  
 180  
 atatgcatga catgttctgg cattcataga agcctggggg tgcacatatc taaggtaaga  
 240  
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac  
 300  
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttggaata  
 360  
 gagaatttga t  
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1			5					10					15		
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20					25					30			
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
	35					40					45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50				55					60					
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70					75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90					95		
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

accggtttgc aggcctggaa agacgggcat ttcgacctgg tgatcgtcga ctgcaacatg  
 60  
 cccgtcctga acggctacga gatgacccgc cgctgcgcgc aacatgaagc cncgccatg  
 120  
 acctcccgcc ctgcacgggg gtctgggttc accgcccacg cccagcccga ggaacgcccc  
 180  
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc  
 240  
 aaccagaaac tcgccgacgt cagccgcgcg ccgcgtccga gccaggccgc cttcagcctc  
 300  
 gacggcctgc acgccctgac cgggggcgag ccgctgctga tgcgtcgctt gatcgacgag  
 360  
 ctgctgagca gttgccaggc ggcccgcgag gcactgctcg gactgcccac c  
 411

<210> 2426

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2426  
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val  
 1 5 10 15  
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu  
 20 25 30  
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe  
 35 40 45  
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu  
 50 55 60  
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu  
 65 70 75 80  
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala  
 85 90 95  
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu  
 100 105 110  
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala  
 115 120 125  
 Arg Glu Ala Leu Leu Gly Leu Pro Ile  
 130 135

<210> 2427  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 2427  
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 60  
 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca ccctgctgat  
 120  
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat  
 180  
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac  
 240  
 aactcatgac ctgcatcctt aatatccagt gacttcatct ccccttcacg cgt  
 293

<210> 2428  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2428  
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala  
 1 5 10 15  
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala  
 20 25 30  
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys  
 35 40 45  
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2431

```

nnacgcgtta acaattaaag cattaacgcc agatgaatgg caaaaacaaa aacattttat
60
atagtcggtt aaatagggat tttcatgggt caatttatta ttcaagggtg ctgccagtta
120
aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact
180
ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgtaaaaaga gctgggtgct actgctactc agactcaaca ctgctgcat
300
attaatgcga aagaaggttaa gaactatact gcttcttatg aattagttag aagtatgcgt
360
gcttcaattt tggcattagg tccattgggt gctcggttcg gtgaagctt
409

```

&lt;210&gt; 2432

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2432

```

Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
 1             5             10             15
Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
      20             25             30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
      35             40             45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
      50             55             60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
65             70             75             80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
      85             90             95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
      100             105

```

&lt;210&gt; 2433

&lt;211&gt; 655

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2433

```

caattgccta caatattcag tacagtcaca tgctgcatag gtttgcagtc tagaaacaac
60
aggctacacc acacagccga ggcggtgtgga ggactatacc atctgggttt acgtaagtgc
120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccagggttga cccctgaagt tcaagtgcaa
240

```

tgccccctgca cagcacagag cagggggacga taggaggcgt gccttctcca gctgaaccac  
 300  
 cgggccagcc gggcgggcag tgggggttgg ggggagggtt gaccatttg tgctgccacg  
 360  
 accaaagaga caggatcttg gagagagtga ggctctgtg cagggggacga tgaaggccca  
 420  
 atctggggac atcagggaaa gcagcaaggg tctggctgat tgtgcaaaaa gaactttttc  
 480  
 tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggaggttt  
 540  
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggagggttaat  
 600  
 caaatgggcc atcactcaat gcagggaggg gaggggtgtg ctcaggacaa cgcgt  
 655

&lt;210&gt; 2434

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
1			5					10					15		
Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25				30			
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
		35					40				45				
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50				55					60					
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65				70				75					80		
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85					90				95			
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100					105				110				
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
		115				120					125				
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

&lt;210&gt; 2435

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2435

aagctttcct tcaccggttc taccocagtg ggccggaccc ttttgaagng cgcggccgat  
 60  
 aacgtgtgc gtacctccat ggaactgggc ngcaatgcc cattcattgt ctttgaggac  
 120  
 gcagatattg accaagcggc ccagggtgcy atggcgcca agatgcgcaa tatcggcgag  
 180  
 gcctgcaccg cagctaaccg cttcttggtc cacgagtctg ttgctgagga gttctctgag  
 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtatggacga aggtattacc  
 300  
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggt ggacgatgct  
 360  
 gcagaaaagg ggcgtaccat ctccaccggc ggtaagcgcg c  
 401

<210> 2436  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2436  
 Lys Leu Ser Phe Thr Gly Ser Thr Pro Val Gly Arg Thr Leu Leu Lys  
 1 5 10 15  
 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn  
 20 25 30  
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln  
 35 40 45  
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala  
 50 55 60  
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu  
 65 70 75 80  
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp  
 85 90 95  
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser  
 100 105 110  
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser  
 115 120 125  
 Thr Gly Gly Lys Arg  
 130

<210> 2437  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2437  
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 t  
 361

<210> 2444  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys  
 1 5 10 15  
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met  
 20 25 30  
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe  
 35 40 45  
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg  
 50 55 60  
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp  
 65 70 75 80  
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala  
 85 90 95  
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr  
 100 105 110  
 Leu Pro Gly Gly Phe Asp Glu Ala  
 115 120

&lt;210&gt; 2445

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac  
 60  
 ctccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag  
 120  
 aggaagcatg tttatcctgt tcagattact gcttctgcca ggctgctgct gctgttgggt  
 180  
 tctgcacatt tgctctttat taagcaaattg tcagagctgg gtgctggcaa gggaatcccc  
 240  
 tgtattttaca caggtaaacc tgagagccag agggcccca accatcctgg ctgcgagggg  
 300  
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata  
 360  
 aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan  
 403

&lt;210&gt; 2446

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln  
 1 5 10 15  
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu  
 20 25 30  
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro  
 35 40 45  
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro  
 50 55 60  
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```
<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens
```

```
<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens
```

1768

```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

```

&lt;210&gt; 2449

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgtctt cccctctctc ctgggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgccgtgtctt
180
gctggactcc agaactctcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc ccnccc
296

```

&lt;210&gt; 2450

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```
<210> 2451
<211> 589
<212> DNA
<213> Homo sapiens
```

```
<210> 2452
<211> 121
<212> PRT
<213> Homo sapiens
```

1770

<210> 2453  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 2453  
 nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc acactcaggg  
 60  
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac  
 120  
 acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct  
 180  
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat  
 240  
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca  
 300  
 gaggcatttg tgtgcgtggg catttgcagc atgactcaga acggagtatg ggggtggcgcg  
 360  
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaacct tcccaacctg cccatcctgg  
 420  
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa  
 480  
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg  
 540  
 gaccggccac gacgcagtgc ccacaggac caccagggtga catgggtgct gcactaggca  
 600  
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggaccgcact tagtcatgtc  
 660  
 agcccccca agaaggagca ccaggctcca gatct  
 695

<210> 2454  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 2454  
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro  
 1 5 10 15  
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu  
 20 25 30  
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His  
 35 40 45  
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr  
 50 55 60  
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr  
 65 70 75 80  
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln  
 85 90 95  
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys  
 100 105 110  
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys  
 115 120 125  
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

	130		135		140	
Leu	Ser	Pro	Arg	Asp	Arg	Pro
145				150		155
Val	Thr	Trp	Val	Leu	His	
						160
						165

<210> 2455  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2455  
 acgcgtcggc agaagcgtca gctgaccgtc ggagccgatc tgtccccagg cgtcgtcagc  
 60  
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc  
 120  
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc  
 180  
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgetgctgta ccggcgcttg  
 240  
 ctgccgccgt tcatcaacgt gatgtcgtg gcggtggcac cgctgggcgg gttgatcggc  
 300  
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc  
 360  
 ggcacgtcgc ccaagaat  
 378

<210> 2456  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2456  
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro  
 1 5 10 15  
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile  
 20 25 30  
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser  
 35 40 45  
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala  
 50 55 60  
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu  
 65 70 75 80  
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly  
 85 90 95  
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val  
 100 105 110  
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn  
 115 120 125

<210> 2457  
 <211> 754  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag  
 60  
 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggtccg gatcagctcc  
 120  
 tatgtcaact ggataaagga tcaccttata aacaggga tgaaggctga gcatgctagc  
 180  
 tcgcttctag aactggcatc caccactaag ttagctcag tgaaatatga tgttgaaata  
 240  
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc  
 300  
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta  
 360  
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgatcctc  
 420  
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct  
 480  
 atgcatcggt caccagagcc tatttgctgc aaaacttta tgaagaggga acaactgaga  
 540  
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt  
 600  
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg  
 660  
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca  
 720  
 atgcctttgc caatgacacc atcccttcac gcgt  
 754

&lt;210&gt; 2458

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
			35				40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
			50				55				60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65					70				75					80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
				85					90					95	
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
			100					105					110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
			115					120					125		
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
			130				135					140			
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

<210> 2459  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2459
accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctgggtcttg agggcggtcgt cgtggctgag aaggctcgctg gtctgccccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
180
aaggtagacc gttcggtctc gcagaacgcc gcgtccatcg cgccctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cgggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac ttgccccag gc
382

```

<210> 2460  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
          20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
          35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
          50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
          85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
          100          105          110

```



<210> 2461  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
 tccggacaaa aggggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc  
 60  
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca  
 120  
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacaccaat tgcgcgacgg  
 180  
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac  
 240  
 ggctggaaaag tcgaactcag ccagatggcg ccgctgccg acgcgcatac cctgtacttc  
 300  
 atcaacctcg gcggtacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg  
 360  
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg  
 420  
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg  
 480  
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac  
 540  
 tacatcatcc tgccgcga  
 558

<210> 2462  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2462  
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu  
 1 5 10 15  
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr  
 20 25 30  
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn  
 35 40 45  
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val  
 50 55 60  
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp  
 65 70 75 80  
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg  
 85 90 95  
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly  
 100 105 110  
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val  
 115 120 125  
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg  
 130 135 140  
 Leu Leu Ala Asp  
 145

<210> 2463  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 2463  
 cccaggggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag  
 60  
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg  
 120  
 ccctatggcg aaacccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg  
 180  
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat  
 240  
 accttgggca ttgccttcct gacgacgacg ctggcggttc tgctcggtgg ttgagcggt  
 300  
 ttggtcgcgg cgatcaaggg cggttgggtc gac  
 333

<210> 2464  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2464  
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe  
 1 5 10 15  
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro  
 20 25 30  
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala  
 35 40 45  
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp  
 50 55 60  
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala  
 65 70 75 80  
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu  
 85 90 95  
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp  
 100 105

<210> 2465  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 2465  
 nntcatgagg acatttcctt catatttggt ggtggtaaatt ccctcctggg acacggggaa  
 60  
 atgaccagag gctggcgcc cactggcag gaacagatgc cagctctgct gcagccatcg  
 120  
 ccccttgagc ggtgggtctt gtgcctcttt ctgcactgct ggtgggtggt gctgttggt  
 180  
 gggatgatga taccggctgc cagagatggc tcagggtcca gctgctgggc tatctcaggc  
 240

actggctgct gggctatctc ggggtgccgc tgctgggcta tctcaggcgc tggctgctgc  
 300  
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt  
 360  
 gctgggtgcc agctgctgcc taccttgcaac tgggctctgg gcactcactg cactcgggct  
 420  
 tttccatctc cgac  
 434

<210> 2466  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 2466  
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile  
 1 5 10 15  
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile  
 20 25 30  
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp  
 35 40 45  
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu  
 50 55 60  
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro  
 65 70 75 80  
 Ser Pro

<210> 2467  
 <211> 306  
 <212> DNA  
 <213> Homo sapiens

<400> 2467  
 atggactcca ccggcaccgg agcaggggggt aagggggaaga agggagcggc cgggcgcaag  
 60  
 gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc  
 120  
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc  
 180  
 gccccgtct acctcgccgc tgcctcgaa tacctcgccg ctgaggttct ggagctcgcc  
 240  
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg  
 300  
 atccgg  
 306

<210> 2468  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 2468  
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85           90           95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2469
gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgacag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcatggaga tgaggaagag
180
gggaccagag cagaggggtca gggttgaaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
360
agaataaaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

65                                      70                                      75                                      80  
 Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly  
    85                                      90                                      95  
 Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser  
    100                                      105                                      110  
 Ala His Leu  
    115

<210> 2471  
 <211> 779  
 <212> DNA  
 <213> Homo sapiens

<400> 2471  
 tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc  
 60  
 ctcacatggt ggcccttgac ttctttcaca gtgaggacct ctgcttcatg aggctcataa  
 120  
 gaagaggagc taaggactat tttgtcatgg gggcgccaat ccaactgcac ttctactata  
 180  
 attctctcat ttcctgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa  
 240  
 gcactgtaaa gatgaacttt ccataaaacc ccaattgttc ctgggtcaat atgaattcca  
 300  
 ttcatacggc cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc  
 360  
 ttttctaagg gattttctaa agtaccaact ttcagctccc cgcttgcaat gaccatgcat  
 420  
 gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc  
 480  
 cctttgaaga attggaaaat ctgtatccac aaggacagtt ctggtgggta aaatgagaac  
 540  
 gtcacccca gggcctggaa tgggtattgtt gtatcctccc cagccttctt caacaccttg  
 600  
 ccattgttca gggaggagacc attttaaacg tgattcaggg gcagaggtag aagctgaaat  
 660  
 agttgggggc ataccttctt tcaccggag aatgacttga acttggcctt cacctaaaac  
 720  
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 779

<210> 2472  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

<400> 2472  
 Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile  
 1                                      5                                      10                                      15  
 Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro  
    20                                      25                                      30  
 Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly  
    35                                      40                                      45  
 Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

50		55		60											
Lys	Leu	Leu	Ile	Leu	Leu	Arg	Ala	Ser	Glu	Gly	Val	Phe	Cys	Asp	Arg
65				70						75					80
Met	Asn	Gly	Ile	His	Ile	Asp	Pro	Gly	Thr	Ile	Gly	Val	Tyr	Gly	Lys
			85						90					95	
Val	His	Leu	Tyr	Ser	Ala	Tyr	Pro	Lys	Asn	Ser	Trp	Thr	His	Leu	Gly
		100					105					110			
Ala	Asp	Ile	Ala	Ser	Gly	Asn	Glu	Arg	Ile	Ile	Val	Glu	Asp	Ala	Val
	115					120					125				
Asp	Trp	Arg	Pro	His	Asp	Lys	Ile	Val	Leu	Ser	Ser	Ser	Ser	Tyr	Glu
	130				135					140					
Pro	His	Glu	Ala	Glu	Val	Leu	Thr	Val	Lys	Glu	Val	Lys	Gly	His	His
145				150					155					160	
Val	Arg	Ile	Tyr	Glu	Arg	Leu	Lys	His	Arg	His	Ile	Gly	Ser	Val	His
			165					170						175	
Val	Thr	Glu	Asp	Gly											
			180												

&lt;210&gt; 2473

&lt;211&gt; 698

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2473

```

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
60
cgcatctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccca taccgggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgacctcta cagggacccc
180
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtagc
300
ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
360
gagctgagcc tactctttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagtg atgtgggcaa cttggatgac
480
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc ccgggctcga
540
gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
600
ggagggttac ccgggccacc agccacttgc tgtgcccggc ctgtgatggg aactcattac
660
tgcccaggca gtcccaacca acccagcagc ctcaattg
698

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&lt;210&gt; 2474

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr  
 1 5 10 15  
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa  
 20 25 30  
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu  
 35 40 45  
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln  
 50 55 60  
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly  
 65 70 75 80  
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala  
 85 90 95  
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro  
 100 105 110  
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly  
 115 120 125  
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu  
 130 135 140  
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp  
 145 150 155 160  
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu  
 165 170 175  
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly  
 180 185 190  
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala  
 195 200 205  
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser  
 210 215 220  
 Pro Asn Gln Pro Ser Ser Leu Asn  
 225 230

&lt;210&gt; 2475

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc  
 60  
 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgcgtgca  
 120  
 ggctcgccca cgggctgccc gccccgtgc gactgctccg cccaggaccg cgctgtgctg  
 180  
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg  
 240  
 gacctaggca agaaccgcat caaacgctc aaccaggacg agttcgccag ctccccgcac  
 300  
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac  
 360  
 aacctcttca acctccggac gctgggtctc gcagcaacc gcctgaagct catcccgcta  
 420  
 ggctgtctca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt  
 480

atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac  
 540  
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg  
 600  
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc  
 660  
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgccca tccgggacta ctccttcaag  
 720  
 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca  
 780  
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc  
 840  
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gtttctctaa cctctctac  
 900  
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc  
 960  
 cagctgggtg gcgggcagct ggccgggtg agccctgcct tccgcggcct caactacctg  
 1020  
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg  
 1080  
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc  
 1140  
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca  
 1200  
 cgcccgagtt tgtccagggg caaggagtcc aaggacttcc ctgatgtgct a  
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
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Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
	50					55				60					
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70					75				80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85						90					95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100						105				110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
	130						135				140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145					150					155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu



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<210> 2477
<211> 548
<212> DNA
<213> Homo sapiens
```

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<400> 2477
nagactgcga tcagacgcgc gtgccagct gaaccagggtg cgtgagaagg ctgccttcag
60
gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggctctga agcggcggcc
180
ctgtctctgg ccgtgaccat ggacctctg gagacctcta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420
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gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc  
 480  
 ttccgtctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg  
 540  
 atggggccc  
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5					10					15	
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
			20					25					30		
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35					40					45			
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55					60				
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65					70					75					80
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85						90					95	
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100					105					110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

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 ttcggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc  
 120  
 aggtactgga atgacaatga agcagcagaa aggcttgctg tgatgtgggc taaaaccttc  
 180  
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc  
 240  
 aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgctac  
 300  
 tctaactcct ggtatcgtga atat  
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys  
 1 5 10 15  
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr  
 20 25 30  
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala  
 35 40 45  
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser  
 50 55 60  
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly  
 65 70 75 80  
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly  
 85 90 95  
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr  
 100 105

&lt;210&gt; 2481

&lt;211&gt; 484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2481

gcgttcaacta acgcttcaac aaactcttac aagcgtcttg ttcttggttt cgaagcacct  
 60  
 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca  
 120  
 agccctaaag gcaagcgtat tgaagctcgt ttccctgatc caaccgctaa cccataccta  
 180  
 gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcaccctggc  
 240  
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa  
 300  
 gttgctagca gcttagaaga agcgcttaag tgccctagatc aagaccgtga gttcttgact  
 360  
 caaggtggcg ttttctctga cgacatgatc gatgcttaca tcgctcttaa agcagaagaa  
 420  
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa  
 480  
 gctt  
 484

&lt;210&gt; 2482

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly  
 1 5 10 15  
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala  
 20 25 30  
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu  
 35 40 45  
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala  
 50 55 60

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65          70          75          80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
85          90          95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
100         105         110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
115         120         125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
130         135         140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
145         150         155

```

&lt;210&gt; 2483

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2483

```

acgcgtgtta gccaaatctt ggttctctccc gttctctcct taccgagcc tgaggcccct
60
ctggagaaca ggcagcctct gaggaacact ctgatccccg atcagccacc ccatcgcttg
120
cgtccccagc cgcttctctc tggccttggt cccctctccc tgtgaaggag agaacagttt
180
cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga
240
aatggctcctt cgtgggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
300
cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
477

```

&lt;210&gt; 2484

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2484

```

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1          5          10          15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
20         25         30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
35         40         45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
50         55         60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65         70         75         80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
85         90         95

```

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser  
                   100                  105                  110  
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg  
                   115                  120                  125  
 Phe Gly  
       130

<210> 2485  
 <211> 608  
 <212> DNA  
 <213> Homo sapiens

<400> 2485  
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc  
 60  
 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag  
 120  
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag  
 180  
 ctagtggca ccatcctgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac  
 240  
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc  
 300  
 tctggcgagt tcccgaagt cttcgctgtt ggtaccgccg cggttgtcac accgatcggc  
 360  
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccgaaa gaccacgatg  
 420  
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg  
 480  
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cgcccccaat gatgtgttca  
 540  
 cgategggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt  
 600  
 gaacgcgt  
 608

<210> 2486  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 2486  
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser  
   1                  5                  10                  15  
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp  
                   20                  25                  30  
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met  
                   35                  40                  45  
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr  
                   50                  55                  60  
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp  
 65                  70                  75                  80  
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu  
                   85                  90                  95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr  
                   100                  105                  110  
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp  
                   115                  120                  125  
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg  
                   130                  135                  140  
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp  
 145                  150                  155                  160  
 Leu Lys Arg Val Cys  
                   165

&lt;210&gt; 2487

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2487

nnccctcag gagagcagcc catggaaggt ccccccaag gggccctga gagccctgac  
 60  
 agtctgcaaa gaaaccagaa agagctccag ggcctcctga ccaggtgca agccctggag  
 120  
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc  
 180  
 cagctggggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg  
 240  
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag  
 300  
 accttggtaa ggctgctgga cattgaagag gctgtgcac  
 339

&lt;210&gt; 2488

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro  
   1                  5                  10                  15  
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu  
                   20                  25                  30  
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp  
                   35                  40                  45  
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly  
                   50                  55                  60  
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val  
 65                  70                  75                  80  
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln  
                   85                  90                  95  
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val  
                   100                  105                  110  
 His

&lt;210&gt; 2489

<211> 594  
 <212> DNA  
 <213> Homo sapiens

<400> 2489  
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 60  
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc  
 120  
 ctgggcttca tggtagacctt cgcgatcgga ggcgatgaccg gcgtactgct ggccatcccg  
 180  
 ggtgtgact tcgtactgca caacagcctg ttcggaattg ctcaattcca caacgtgatc  
 240  
 atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcggtc  
 300  
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc  
 360  
 ttcgtcgcgt tcatgccgct ctatgcactg ggtttcattg gcatgaccg ttgtttgaac  
 420  
 gccccccca cccctgagtg ggtcccgta ctgtacgttg ccattggtcg tgcaactgat  
 480  
 atcgtgtcg gtatcgctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag  
 540  
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg  
 594

<210> 2490  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 2490  
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly  
 1 5 10 15  
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg  
 20 25 30  
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala  
 35 40 45  
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe  
 50 55 60  
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile  
 65 70 75 80  
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe  
 85 90 95  
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala  
 100 105 110  
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr  
 115 120 125  
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr  
 130 135 140  
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met  
 145 150 155 160  
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val  
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala  
 180 185 190  
 His Thr Leu Glu Trp Ser  
 195

<210> 2491  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

<400> 2491  
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc  
 60  
 actacgttgt tgcttgggtct attccatgca gtaacgacga atatgtcgcg atctcaggat  
 120  
 gatcttgcag tgttcgaaaag cggaactgta ttccgcgccg tcaactccggc tgcggcacccg  
 180  
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg  
 240  
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg  
 300  
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgcccga gaaggctgct  
 360  
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggctccatg gcatcccgg  
 420  
 cgattgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc  
 480  
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat  
 540  
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 592

<210> 2492  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 2492  
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 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr  
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 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly  
 35 40 45  
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val  
 50 55 60  
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu  
 65 70 75 80  
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu  
 85 90 95  
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala  
 100 105 110  
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val  
 115 120 125



Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala  
 130 135 140  
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro  
 145 150 155 160  
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu  
 165 170 175  
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val  
 180 185 190  
 Met Val Ile Ser Arg  
 195

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

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 120  
 ctatcgaaact acctcatgct cgaacctcat tcgggtcatca agaccatcga ctcttcctta  
 180  
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg  
 240  
 atcccgtctgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc  
 300  
 aagggcgcca ggccggggagc cgaccgtctt tctcgggtct acctccagct gacgtcggtg  
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 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct  
 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro  
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 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg  
 20 25 30  
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu  
 35 40 45  
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser  
 50 55 60  
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val  
 65 70 75 80  
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu  
 85 90 95  
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser  
 100 105 110  
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala  
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile  
130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

nnggcctggc ccagttgcac cagcagcgct gcggacactc ggggcggcag tcggtctgtc  
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120  
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agcccccgcac ctgccgcttg  
180  
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg  
240  
gacgtcaaca ccctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc  
300  
gagttgacct agctgctcaa ctgcctctgc acagcagtca aagccatctc ttcggcggtg  
360  
cgcaaggcgg gcatcgcgca cctctatggc attgctggtt ctaccaacgt gacagggtgat  
420  
caagttaaga agctggacgt cctctccaac gacctgggta tgaacatgtt aaagtcatcc  
480  
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag  
540  
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc  
600  
cttgtgtccg ttggaaccat ttttggcatc tatagaaaga aatcaactga tgagccttct  
660  
gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc  
720  
agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggacccg  
780  
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc  
840  
tacagcetta acgagggcta cgccaaggac tttgaccctg ccgtcactga gtacatccag  
900  
aggaagaagt tccccccaga taattcagct ccttatgggg cccggtatgt gggctccatg  
960  
gtggctgatg ttcacgcac tctggtctac ggagggatat ttctgtacct cgctaacaag  
1020  
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg  
1080  
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca  
1140  
gacattcacc agaggcgccc ggtgatcttg gggcccccg acgacgtgct cgagttcctg  
1200  
aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgcttgcac cggagaattg  
1260  
cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt  
1320

cctagagagc agaaataaaa agcatgacta tttccaccat caaatgctgt agaagcttg  
 1380  
 gcactcccta accaaatgct gtctccataa tgccactggt gttaagatat attttgagtg  
 1440  
 gatggaggag aaataaaactt attcctcctt aaaaaaaaa  
 1478

<210> 2496

<211> 338

<212> PRT

<213> Homo sapiens

<400> 2496

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Phe	Val	Met	Glu	Gly	Arg	Lys	Ala	Arg	Gly	Thr	Gly	Glu	Leu	Thr	
		20					25					30			
Gln	Leu	Leu	Asn	Ser	Leu	Cys	Thr	Ala	Val	Lys	Ala	Ile	Ser	Ser	Ala
		35				40						45			
Val	Arg	Lys	Ala	Gly	Ile	Ala	His	Leu	Tyr	Gly	Ile	Ala	Gly	Ser	Thr
	50				55					60					
Asn	Val	Thr	Gly	Asp	Gln	Val	Lys	Lys	Leu	Asp	Val	Leu	Ser	Asn	Asp
65					70					75				80	
Leu	Val	Met	Asn	Met	Leu	Lys	Ser	Ser	Phe	Ala	Thr	Cys	Val	Leu	Val
			85						90					95	
Ser	Glu	Glu	Asp	Lys	His	Ala	Ile	Ile	Val	Glu	Pro	Glu	Lys	Arg	Gly
		100						105					110		
Lys	Tyr	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp	Gly	Ser	Ser	Asn	Ile	Asp
	115					120						125			
Cys	Leu	Val	Ser	Val	Gly	Thr	Ile	Phe	Gly	Ile	Tyr	Arg	Lys	Lys	Ser
	130					135						140			
Thr	Asp	Glu	Pro	Ser	Glu	Lys	Asp	Ala	Leu	Gln	Pro	Gly	Arg	Asn	Leu
145					150					155				160	
Val	Ala	Ala	Gly	Tyr	Ala	Leu	Tyr	Gly	Ser	Ala	Thr	Met	Leu	Val	Leu
			165					170						175	
Ala	Met	Asp	Cys	Gly	Val	Asn	Cys	Phe	Met	Leu	Asp	Pro	Ala	Ile	Gly
		180						185					190		
Glu	Phe	Ile	Leu	Val	Asp	Lys	Asp	Val	Lys	Ile	Lys	Lys	Lys	Gly	Lys
	195					200						205			
Ile	Tyr	Ser	Leu	Asn	Glu	Gly	Tyr	Ala	Lys	Asp	Phe	Asp	Pro	Ala	Val
	210					215					220				
Thr	Glu	Tyr	Ile	Gln	Arg	Lys	Lys	Phe	Pro	Pro	Asp	Asn	Ser	Ala	Pro
225					230						235			240	
Tyr	Gly	Ala	Arg	Tyr	Val	Gly	Ser	Met	Val	Ala	Asp	Val	His	Arg	Thr
			245						250					255	
Leu	Val	Tyr	Gly	Gly	Ile	Phe	Leu	Tyr	Pro	Ala	Asn	Lys	Lys	Ser	Pro
		260						265					270		
Asn	Gly	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys	Asn	Pro	Met	Ala	Tyr	Val
	275						280					285			
Met	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr	Gly	Lys	Glu	Ala	Val	Leu
295					300										
Asp	Val	Ile	Pro	Thr	Asp	Ile	His	Gln	Arg	Ala	Pro	Val	Ile	Leu	Gly
305					310					315				320	
Ser	Pro	Asp	Asp	Val	Leu	Glu	Phe	Leu	Lys	Val	Tyr	Glu	Lys	His	Ser

325 330 335

Ala Gln

<210> 2497  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2497  
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 60  
 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg  
 120  
 atcctgtcag cgcgtagcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag  
 180  
 atggcgaacg gttccgagga cgaccgtgcc gttgcatggg acaaatacgc gaaggctgaa  
 240  
 gaccgtctcg tcgcgggcgg tggctatggc gcctctgcag aggcagcccg aatcgcgctcg  
 300  
 aacttggggc ttgacgaccg cgctctttcc cagccgttga aaaacctctc ggggtggtcag  
 360  
 cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga  
 399

<210> 2498  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2498  
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg  
 1 5 10 15  
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp  
 20 25 30  
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp  
 35 40 45  
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly  
 50 55 60  
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu  
 65 70 75 80  
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala  
 85 90 95  
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro  
 100 105 110  
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg  
 115 120 125  
 Ile Leu Phe Ser Gly  
 130

<210> 2499  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2499

nggccgggcg aagacccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa  
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 tatgacgacc ggcgattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg  
 120  
 tggatcacca tcttgcgcaa gcgcgacaac ttctcgaaaag ccttcgacga tttccagccc  
 180  
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc  
 240  
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc  
 300  
 atggaaaaag gcccgggcctt ctccaggctg ctgtgggact tcgtcgac  
 348

&lt;210&gt; 2500

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2500

Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp  
 1 5 10 15  
 Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu  
 20 25 30  
 Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg  
 35 40 45  
 Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala  
 50 55 60  
 Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile  
 65 70 75 80  
 Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala  
 85 90 95  
 Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp  
 100 105 110  
 Asp Phe Val Asp  
 115

&lt;210&gt; 2501

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaacca tcaaatacaca  
 60  
 taatgcccatt taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt  
 120  
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg  
 180  
 ctttcaagag tcaaacaatt ttactggtgc atcatttcca ttattctttt ctcttttgca  
 240  
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag  
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacatca aaaaaatcct  
 360  
 taaggggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg  
 420  
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct  
 480  
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca  
 540  
 gatgtgaaat gctgaatcat taatcacag  
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1				5				10						15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
		20					25						30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
		35				40					45				
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
	50				55					60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65				70				75					80		
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85					90					95		
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

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 120  
 accaatgggg agcgctttct ctacctgccc ccacctcact acgtcggtcc ccacatccca  
 180  
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgcct  
 240  
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 300  
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc  
 360  
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tgttgcccc ctcacgcgt  
 419

<210> 2504

<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 2504  
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 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro  
 20 25 30  
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro  
 35 40 45  
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val  
 50 55 60  
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly  
 65 70 75 80  
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln  
 85 90 95  
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp  
 100 105 110  
 Thr Ala Leu Leu Leu Pro Pro Ser Arg  
 115 120

<210> 2505  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 2505  
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 ccgctcgtgt tgggtgccgtt ggctcgggttc accggcgatc ggctgtctgat gggccaatgg  
 120  
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggtcttc  
 180  
 aacgtgggttc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttctgg  
 240  
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga  
 300  
 cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag  
 360  
 tggcgatcct caccgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg  
 420  
 cgtcgggtgc agtcgtcccg gctgttgtgt cggtgtcgtt gggtaatggt tcgacgaccc  
 480  
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg  
 540

<210> 2506  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2506  
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1		5		10		15									
Ser	Met	Gly	Leu	Pro	Leu	Val	Leu	Val	Pro	Leu	Ala	Arg	Phe	Thr	Gly
		20					25						30		
Asp	Arg	Arg	Leu	Met	Gly	Gln	Trp	Thr	Asn	Gly	Arg	Val	Met	Ala	Ala
	35					40						45			
Ile	Ala	Trp	Ile	Val	Val	Ala	Ala	Val	Ser	Ala	Leu	Asn	Val	Val	Leu
	50					55					60				
Val	Val	Glu	Thr	Val	Met	Gly	Ala								
65						70									

&lt;210&gt; 2507

&lt;211&gt; 922

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2507

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naccgctgaa gggcagagga gagagaccag tgaaggggga ggaggcggcc aaaaggagac
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agcttcatgc cccagggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
120
acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
180
ttccactggc acttcctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
240
ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
300
gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
360
ctgcgttact acaaaacagg aacctgcac cagagacag acgcacgtgg ccaactgcgtg
420
aagaatgggc tgcaactgtgc cttcgcgcac gggcccatg acctccgctc ccctgtctac
480
gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
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600
gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc
660
aagaagcccc cgcggtgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
720
gaccggcggc ggagcccccg gaagcacaaa tacaggctgt ctccatgtcc aaacgtcaag
780
cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgcctg ccagtactgc
840
cacacccgca ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga
900
aggggggggg gggtgaggga gg
922

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&lt;210&gt; 2508

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2508

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro  
 1 5 10 15  
 Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe  
 20 25 30  
 His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg  
 35 40 45  
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn  
 50 55 60  
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His  
 65 70 75 80  
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys  
 85 90 95  
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys  
 100 105 110  
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser  
 115 120 125  
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn  
 130 135 140  
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala  
 145 150 155 160  
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp  
 165 170 175  
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys  
 180 185 190  
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His  
 195 200 205  
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser  
 210 215 220  
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly  
 225 230 235 240  
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu  
 245 250 255  
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg  
 260 265 270  
 Gly Gly Gly Val Arg Glu  
 275

&lt;210&gt; 2509

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

gccggccttg acctgggccg ggcgatggct ccacggcaag gtccaataact ccgtgcgctt  
 60  
 gtggcgctgg acttcgtcga tgcccgcgag gttttgctgc ccgcgaccat tggactggac  
 120  
 gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga  
 180  
 cggcagggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc  
 240  
 caccgctccc agcggaaatct cgtagactta ggcgcagggt tggtaaggcg tgtagcggtc  
 300

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348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
			20					25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
		35					40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50					55					60				
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70					75				80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
				85					90					95	
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
			100					105							

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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120  
cctgtcatcg cacacgtcgg ttatccgcag gccgccgacg agtattacca gttgctttta  
180  
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240  
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatectctc  
300  
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360  
gagccagttc ggttcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatgggtg  
420  
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480  
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt  
540  
atgtccggac agatccccgc tgaggaacac atcccgtcg atctagctat gatcattgag  
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660  
gac  
663

<210> 2512  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2512  
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 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val  
 20 25 30  
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr  
 35 40 45  
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro  
 50 55 60  
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe  
 65 70 75 80  
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala  
 85 90 95  
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln  
 100 105 110  
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg  
 115 120 125  
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile  
 130 135 140  
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile  
 145 150 155 160  
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr  
 165 170 175  
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro  
 180 185 190  
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly  
 195 200 205  
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp  
 210 215 220

<210> 2513  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 360

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368

<210> 2514  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2514  
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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala  
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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly  
35 40 45  
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His  
50 55 60  
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg  
65 70 75 80  
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp  
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<210> 2515  
<211> 351  
<212> DNA  
<213> Homo sapiens

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120  
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc  
180  
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct  
240  
ctgggtgcag gtgggcagac aatgggcca caccacct cagccccgct ccagtatcag  
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cattccagac ccaccacct ggcccttgg tcaccgggag acctcacgcg t  
351

<210> 2516  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 2516  
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Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser  
20 25 30  
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn  
35 40 45  
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

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      50              55              60
Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
65              70              75              80
Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
      85              90              95
Thr Arg

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&lt;210&gt; 2517

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2517

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120
cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggtt ggtctggccg
180
aggccacaca ttccctgggg actgagctcc aaggtgctgg gtccttgagc aggaagcggc
240
cagtgttgag tgggcagtgt ctcactccag cccctccttc ccaggccagt tcttctcatc
300
tccctcagtc tttcccaagc aggcctcat ctacagggca gacctgactg gctagc
356

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&lt;210&gt; 2518

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2518

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Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu
  1              5              10              15
Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
      20              25              30
Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
      35              40              45
Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
      50              55              60
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
65              70              75              80
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
      85              90              95
Pro Ser Ser Thr Gly Gln Thr
      100

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&lt;210&gt; 2519

&lt;211&gt; 830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2519

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 cgacagccct ggtgccaaagc cctgtctgag cccaccagg aggaagcgcg tgctggctgc  
 120  
 tctccatctg ctctgggact ctggcctgct gtttctctg cctgccactc cccaaccccg  
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 360  
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 420  
 ttctccaaac ccagctctcc ctgaggctc ccactctgct gctcacgctg agggcactct  
 480  
 accctgcctt ccgcagctca caggcagacc tggagcccag tgactacagg gttggcctcc  
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 600  
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 660  
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 720  
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 830

&lt;210&gt; 2520

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2520

Met	Ser	Pro	Ala	Arg	Arg	Cys	Leu	Gly	Leu	Gly	Pro	Glu	Asn	Phe	Gly
1				5					10					15	
Glu	Glu	Val	Gly	Leu	Leu	Cys	Asn	Cys	Leu	Val	Pro	Phe	Lys	Val	Ile
			20				25						30		
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40					45				
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln	Ser
	50				55					60					
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg	Gln
65				70					75					80	
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg	Leu
			85				90						95		
Arg	Gly	Ala	Val	Leu	Pro	Arg	Arg	Leu	Thr	Gly					
			100					105							

&lt;210&gt; 2521

&lt;211&gt; 4291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2521

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120  
acactcctcc tggcggtccc cccatgctcc ggggcagcca cccaacccc ctccctgccg  
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gccgaccgtt tcatggcggc catcgaggct atcacgtcaa aagagaagga gatcaccatc  
420  
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480  
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540  
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720  
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&lt;210&gt; 2522

&lt;211&gt; 952

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2522

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 Gly Gly Pro Ala Pro Gly Cys Ser Arg Arg Thr Pro Pro Pro Met  
 20 25 30  
 Ala Pro Leu Ala Leu Val Gly Val Thr Leu Leu Leu Ala Ala Pro Pro  
 35 40 45  
 Cys Ser Gly Ala Ala Thr Pro Thr Pro Ser Leu Pro Pro Pro Pro Ala  
 50 55 60  
 Asn Asp Ser Asp Thr Ser Thr Gly Gly Cys Gln Gly Ser Tyr Arg Cys

1808

500										505				510				
Leu	Leu	Asn	Leu	Arg	Val	Gly	Asp	Ala	Gln	Gly	Met	Phe	Glu	Pro	Asp			
		515					520					525						
Gly	Gly	Gly	Arg	Pro	Lys	Gly	Arg	Leu	Val	Ala	Pro	Leu	Leu	Ala	Thr			
		530					535					540						
Val	Thr	Ile	Leu	Asp	Asp	Asp	His	Ala	Gly	Ile	Phe	Ser	Phe	Gln	Asp			
545							550					555						
Arg	Leu	Leu	His	Val	Ser	Glu	Cys	Met	Gly	Thr	Val	Asp	Val	Arg	Val			
				565							570							
Val	Arg	Ser	Ser	Gly	Ala	Arg	Gly	Thr	Val	Arg	Leu	Pro	Tyr	Arg	Thr			
				580							585							
Val	Asp	Gly	Thr	Ala	Arg	Gly	Gly	Gly	Val	His	Tyr	Glu	Asp	Ala	Cys			
				595									605					
Gly	Glu	Leu	Glu	Phe	Gly	Asp	Asp	Glu	Thr	Met	Lys	Thr	Leu	Gln	Val			
				610									620					
Lys	Ile	Val	Asp	Asp	Glu	Glu	Tyr	Glu	Lys	Lys	Asp	Asn	Phe	Phe	Ile			
625							630					635						
Glu	Leu	Gly	Gln	Pro	Gln	Trp	Leu	Lys	Arg	Gly	Ile	Ser	Ala	Leu	Leu			
				645							650							
Leu	Asn	Gln	Gly	Asp	Gly	Asp	Arg	Lys	Leu	Thr	Ala	Glu	Glu	Glu	Glu			
				660							665							
Ala	Arg	Arg	Ile	Ala	Glu	Met	Gly	Lys	Pro	Val	Leu	Gly	Glu	Asn	Cys			
				675									685					
Arg	Leu	Glu	Val	Ile	Ile	Glu	Glu	Ser	Tyr	Asp	Phe	Lys	Asn	Thr	Val			
				690									700					
Asp	Lys	Leu	Ile	Lys	Lys	Thr	Asn	Leu	Ala	Leu	Val	Ile	Gly	Thr	His			
705							710					715						
Ser	Trp	Arg	Glu	Gln	Phe	Leu	Glu	Ala	Ile	Thr	Val	Ser	Ala	Gly	Asp			
				725							730							
Glu	Glu	Glu	Glu	Glu	Asp	Gly	Ser	Arg	Glu	Glu	Arg	Leu	Pro	Ser	Cys			
				740							745							
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe			
				755									765					
Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly			
				770									780					
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu			
785							790					795						
Ala	Ser	His	Phe	Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala			
				805							810							
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser			
				820							825							
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn			
				835									845					
Val	Thr	Gly	Ser	Asn	Ala	Val	Asn	Val	Phe	Leu	Gly	Leu	Gly	Val	Ala			
				850									860					
Trp	Ser	Val	Ala	Ala	Val	Tyr	Trp	Ala	Val	Gln	Gly	Arg	Pro	Phe	Glu			
865							870					875						
Val	Arg	Thr	Gly	Thr	Leu	Ala	Phe											

930  
Ala Tyr Cys His Ile Arg Gly Phe  
945 950

940

<210> 2523  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2523  
nnnattacct acgttcgcac cctgtcagga ttgcctada ccgcatttgt cgtggatgtc  
60  
ttcagccgaa aaattgttgg tgttgctaca cgctcgacga tgcgtaccga tgcgctgccc  
120  
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattggaaa ccagttaatt  
180  
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gtttagcgaa  
240  
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa  
300  
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc  
360  
ggagaagtcg aattggccac cttgcggnnn nn  
392

<210> 2524  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2524  
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe  
1 5 10 15  
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser  
20 25 30  
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu  
35 40 45  
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp  
50 55 60  
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu  
65 70 75 80  
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn  
85 90 95  
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His  
100 105 110  
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu  
115 120 125  
Arg Xaa  
130

<210> 2525  
<211> 378  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2525

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 60  
 tcccctttga atacgtgggtg ctgtcaccgc cgcgggaatc aagaaccgca cgttgcgcaa  
 120  
 atcgtgcgcg tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa  
 180  
 tgattcatat ctccgatata agcacgacag gggcgtcatt ccgctctgca catcggttg  
 240  
 gaagtcagcg gtgcgcccgc acgcctgcga ttctgggtga agacgcgca ctaccattca  
 300  
 gaactggtgg ccgcaacact cattcgagc gagaagccc cggatttgcc caacacctat  
 360  
 caatacggcg tggaattc  
 378

&lt;210&gt; 2526

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
1				5				10					15		
Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
			20					25					30		
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
			35				40						45		
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
			50				55				60				
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65					70					75				80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
				85					90					95	
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
			100					105						110	

&lt;210&gt; 2527

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2527

ntggcacct tccgaatggg acggcggccc aaacccgaga tcatggccag caaagagcag  
 60  
 cagatccaga gagacgacct tggagccagt cccagagca gcagccagcc agaccacggc  
 120  
 cgctctccc cccagaagc tccgacagg cccaccatct ccacggcctc cgagacctca  
 180  
 gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg  
 240  
 gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcgc catcccccca  
 300

cgcgt  
305

<210> 2528  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2528  
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala  
1 5 10 15  
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln  
20 25 30  
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro  
35 40 45  
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr  
50 55 60  
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val  
65 70 75 80  
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser  
85 90 95  
Ala Ile Pro Pro Arg  
100

<210> 2529  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2529  
acgcgtctcc ccgtggtggg tcccgatccc ccggccggct ctgccactga agcctctccc  
60  
tgtgtctctcc gtgccccccg agtggcctgc tagcccgcgc tcccacacag tctccttgat  
120  
gtgaagtgtc acccggttg ctgcggcgtg tctccgccgt aacacgtgta taccgggtca  
180  
gccatggcgg cggtgctgg gaaggctcct gcgtatggct ttgccatccg ggacccgggc  
240  
tttgctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca  
300  
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360  
ccatgagctc cacagggtcc tgaggga  
387

<210> 2530  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2530  
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu  
1 5 10 15  
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

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                20                25                30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
      35                40                45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
      50                55                60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
      65                70                75                80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
      85                90                95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
      100                105                110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
      115                120

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&lt;210&gt; 2531

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2531

```

tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaagggttga
60
gctttccaac cagctgaaga tgacaagact aaacccaag tcgctgcagc tctgtgtcat
120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac ctctgtcatc
180
agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaatcctt taggtctcaa ttctttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggctctgc
360
tgcctccacc cacgtgcagg gaaaggaagg acgcgt
396

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&lt;210&gt; 2532

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2532

```

Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
  1                5                10                15
Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
      20                25                30
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35                40                45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50                55                60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
      65                70                75                80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85                90                95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2533  
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 gctgtggcan ccccatgga cgtgatcaag tgcgactgc aggcagacgg gcagggccag  
 120  
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg  
 180  
 gtccttttca aggggctggt actcaattgc tgccgcgcct tcctgtcaa catggtggtc  
 240  
 ttcgtgcct atgaggcagt gctgaggctc gccggggggtc tgctcacata gccggtcccc  
 300  
 acgcccagcg gccacccac cagcagctgc tggaggctgt agtggtctgga ggaggcaagg  
 360  
 ggtagtggtg ctgggttcgg gacccacacag ggccattgcc caggagaatg aggagcctcc  
 420  
 ctgcagtgtt gtcggccgag gcctgagctc gccctgccca gctactgacc tcaggtcgag  
 480  
 gggcccgcga gccat  
 495

<210> 2534  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2534  
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly  
 1 5 10 15  
 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg  
 20 25 30  
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His  
 35 40 45  
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys  
 50 55 60  
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val  
 65 70 75 80  
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr  
 85 90 95

<210> 2535  
 <211> 1904  
 <212> DNA  
 <213> Homo sapiens

<400> 2535  
 ncggcccggg aacgtggctg gttggaggag gtagatcacc ctttctgcgg gggacgattt  
 60



cgtcggtggt aggcctgctac catgagggtg aatcagaaca ccttgctgct ggggaagaag  
120  
gtggtccttg taccctacac ctccggagcat gtgccagca ggtaccacga gtggatgaaa  
180  
tcagaggagc tgcagcggtt gacagcctcg gagccgctga ccctggagca ggagtatgcc  
240  
atgcagtga gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag  
300  
aagtggcagg ccagccagg cgccaccgaa gagagctga tgggtggaga cgtgaacctc  
360  
ttcctcacag atctagaaga cccaccttg ggggagatcg aggtcatgat tgcagagccc  
420  
agctgcagg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg  
480  
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc  
540  
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggaggtg  
600  
accctcagac tgacagtga tgagtccgag catcagtggc ttctggagca gaccagccac  
660  
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg  
720  
ggcagccact ctgtgtgagc aggggtgttg gcccatcac ttcaaagacc agagccctgc  
780  
actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg  
840  
cggggcttgc tgtggcctcc ctccagctag tgggtgtggc gagcagactc cagggccagg  
900  
gccagttccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg  
960  
agggcagggg tccatgggag atgtcgggat gaagggtggg gctggaggtg cagggggacc  
1020  
tggaacatgg atgggagtgg acaggccttt ctcccttagag gccagaggtg ctgccctggc  
1080  
tgggagtga gctccaggca ctaccagctt tcctgatttt ccggtttggt ccatgtgaag  
1140  
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgctc  
1200  
gcagaggcag gctggtgtga ccctgggaac ttgaccggg aacaacaggt ggtccagagt  
1260  
gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga  
1320  
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat  
1380  
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg  
1440  
tcaggccatc agctctgtcc ctctggtgct ccacgtctg ttctcacc tccatctctg  
1500  
ggagcagctg cacctgactg gccacgcggg ggcagtggag gcacaggctc aggggtggccg  
1560  
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg  
1620  
ggagcactct gactcctaac agtcttctt gccctgccat catctggggg ggctggctgt  
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca  
 1740  
 ggtggggaaa cagtcttaga taagtaaggt gacttgcccta aggcctccca gcacccttga  
 1800  
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 1860  
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact  
 1904

<210> 2536  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 2536  
 Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu  
 1 5 10 15  
 Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met  
 20 25 30  
 Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu  
 35 40 45  
 Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys  
 50 55 60  
 Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly  
 65 70 75 80  
 Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr  
 85 90 95  
 Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu  
 100 105 110  
 Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met  
 115 120 125  
 Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys  
 130 135 140  
 Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His  
 145 150 155 160  
 Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg  
 165 170 175  
 Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser  
 180 185 190  
 His Val Glu Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys  
 195 200 205

<210> 2537  
 <211> 509  
 <212> DNA  
 <213> Homo sapiens

<400> 2537  
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 gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtccctgcctc agttatcctt  
 120  
 ccgctgctac tgctcgactc ccccgtcatt gcgtggtggc ccttctccgg ccctgacaac  
 180

ctcgcctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac  
 240  
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac  
 300  
 ctgtgttggg ctcgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat  
 360  
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg  
 420  
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgcg  
 480  
 cccggcatct ccgcgatcgt catgtcgac  
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
			35					40					45		
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65					70					75					80
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
				85					90					95	
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
			115				120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135				140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145					150					155					160
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
					165										

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

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 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcggtt tctcaacgag  
 120  
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttctctcggtg  
 180

ggggtcccgc tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc  
 240  
 gtagtggcca atatgaccgc aatttccgga cgtcgcattg cagagaccat cgccaggcgc  
 300  
 ggaggcattg ctgttctgcc ccaagatatc ccggcggatt tcgtcgcccc gtccattcgg  
 360  
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact  
 420  
 gtcggtgagg ccatgaactt gctcaacaag cgc  
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1			5					10						15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20					25					30			
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35				40					45				
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70				75					80		
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100					105					110			
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115				120						125			
Asn	Leu	Leu	Asn	Lys	Arg										
		130													

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

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 ccctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc  
 120  
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct cccagaggaa  
 180  
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac  
 240  
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgact  
 300  
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt  
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt  
 420  
 gcacagttct cactgttctg cgtgccccage cctcacact ggacgcccac ctcacactct  
 480  
 tctgccaagg gagactttgg ttctccctt cctgtgtctg gctgtgcggg ccacagtcct  
 540  
 ctgcacgcca gcagcatgac gcgt  
 564

<210> 2542  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2542  
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe  
 1 5 10 15  
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu  
 20 25 30  
 Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser  
 35 40 45  
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe  
 50 55 60  
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala  
 65 70 75 80  
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His  
 85 90 95  
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 100 105

<210> 2543  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2543  
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 aacgtgcca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta  
 120  
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg  
 180  
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc  
 240  
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag  
 300  
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gcccctgtcc  
 360  
 aatggggccc agcaggcagc agtgctg  
 387

<210> 2544  
 <211> 122  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2544

```

Met Glu Trp Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1             5             10             15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
      20             25             30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
      35             40             45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
      50             55             60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65             70             75             80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
      85             90             95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
      100            105            110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
      115            120

```

&lt;210&gt; 2545

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2545

```

gcgattatatt tcgtgctgcc cggacttatc atggctcggct ggtgggtcagg tttcccgtac
60
tggaacaccc tcgtatctg tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gagggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaagggt gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tggtgtcgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

&lt;210&gt; 2546

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1             5             10             15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
      20             25             30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
      35             40             45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
      50             55             60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65              70              75              80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
              85              90              95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
              100              105              110

```

&lt;210&gt; 2547

&lt;211&gt; 556

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2547

```

acgcgtgcac acacacacac gcaggcgtac acgctcacia gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcactttctc tttacttttt aaagacaggg cacttgcctt
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacia aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctc cctagaaatt
240
caagtgtgtg ttggaaagtg gacttaacgg tcaaagaaaa aggctggcc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctccttggtg taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

```

&lt;210&gt; 2548

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2548

```

Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1          5          10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
100          105

```

<210> 2549  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2549  
 nnccagcctc tctccgaccg .cgtacgtatt gaatttgata aagaagccaa cacggttgtt  
 60  
 atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt  
 120  
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc  
 180  
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta  
 240  
 acagtagaaa cacgtcgcgc aggtcgcgacg gaaaatgaag cggttcgcgtg ggtatctgat  
 300  
 ggttctggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact  
 360  
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta  
 420  
 acaaaaatatt ctgat  
 435

<210> 2550  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2550  
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala  
 1 5 10 15  
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu  
 20 25 30  
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe  
 35 40 45  
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly  
 50 55 60  
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val  
 65 70 75 80  
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg  
 85 90 95  
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys  
 100 105 110  
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys  
 115 120 125  
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser  
 130 135 140  
 Asp  
 145

<210> 2551  
 <211> 403  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaactga  
 60  
 ggactccact tctggggacg cctgggtcgt tcgcccacca ggcctaggct acgctccatg  
 120  
 ctccccagc aatctctgtc tacacctcct gcggcgccct gccctcctcc gacccttttc  
 180  
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct  
 240  
 ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg  
 300  
 gcctctggac tgccaggctg ggttggggac caggggaacat cggctctactc aggtgtgagg  
 360  
 gggcaggtct ggcctgcccc aaagttggct ccctcctgga can  
 403

&lt;210&gt; 2552

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2552

Xaa	Pro	Ala	Ser	Leu	Thr	Ser	Val	Ser	Pro	Pro	Arg	Gly	Arg	Leu	Ser
1				5					10					15	
Thr	Leu	Asn	Arg	Gly	Leu	His	Phe	Trp	Gly	Arg	Leu	Val	Arg	Ser	Pro
		20						25					30		
Thr	Arg	Pro	Arg	Leu	Arg	Ser	Met	Leu	Pro	Gln	Gln	Ser	Leu	Ser	Thr
		35					40					45			
Pro	Pro	Ala	Ala	Pro	Cys	Pro	Pro	Pro	Thr	Pro	Phe	Gln	Pro	Xaa	Ser
		50				55					60				
Pro	Pro	Thr	Pro	Ser	Glu	Lys	Gln	Pro	Gln	Ile	Pro	Glu	Val	Glu	Ala
65					70					75				80	
Pro	Ala	Ser	Pro	Arg	Gly	Thr	Ser	Pro	Thr	Val	Phe	Trp	Glu	Pro	Leu
				85					90					95	
Trp	Pro	Gly	Thr	Ala	Ser	Gly	Leu	Pro	Gly	Trp	Val	Gly	Asp	Gln	Gly
			100				105						110		
Thr	Ser	Val	Tyr	Ser	Gly	Val	Arg	Gly	Gln	Val	Trp	Pro	Ala	Pro	Lys
		115					120					125			
Leu	Ala	Pro	Ser	Trp	Thr										
															130

&lt;210&gt; 2553

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg  
 60  
 gagagatata gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag  
 120  
 gcctcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt  
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg  
 240  
 gaccctcctg gcccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc  
 300  
 tctgcccaaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact  
 360  
 gagcctgcc gcatcccagn  
 380

<210> 2554  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2554  
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly  
 1 5 10 15  
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr  
 20 25 30  
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys  
 35 40 45  
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly  
 50 55 60  
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln  
 65 70 75 80  
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp  
 85 90 95  
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro  
 100 105 110

<210> 2555  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2555  
 ntccggatgg aaaagtaaag accagcaata gccaataacg ccattaacac atacccatat  
 60  
 atgttggttaa tgctgcccg tagttcggtg gcattcttca tgggcaatag tttaatggga  
 120  
 gataacgcga ataatggtag tgctgttcta gtgtcacag acctgggtcac ccaaatagaa  
 180  
 ggatttatat cctcccatat cctcattttt gtgtcggttg gcctcggtat tgtctttacc  
 240  
 gttgccactc gaggtgtaca gttccgctc ttcgggcaca tgtggcacct catgctcgat  
 300  
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat  
 360  
 cacgcggn  
 368

<210> 2556  
 <211> 102  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

&lt;210&gt; 2557

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtgagccg
60
attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa ggggtggcaag atcggctctct tcggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

&lt;210&gt; 2558

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

&lt;210&gt; 2559

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2559

```

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

&lt;210&gt; 2560

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2560

```

Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1      5      10      15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
20     25     30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
35     40     45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
50     55     60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65     70     75     80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
85     90     95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
100    105    110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
115    120    125
Lys

```

<210> 2561  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2561  
 nnactcacca ctgtggttct actatgcctt ctgaccccggt cttggacttc aactgggaga  
 60  
 atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga  
 120  
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac  
 180  
 tcaaagacta aggtggttat gaagggtcaa aatgtatcta tgttttggtc ccataagaac  
 240  
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat  
 300  
 ggaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc  
 360  
 taaaaatgca aagcccaagt taccagctgt taaaaatata gtcgtgactt cagcttcacg  
 420  
 attgtcgac  
 429

<210> 2562  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2562  
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr  
 1 5 10 15  
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser  
 20 25 30  
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala  
 35 40 45  
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys  
 50 55 60  
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn  
 65 70 75 80  
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu  
 85 90 95  
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile  
 100 105 110  
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr  
 115 120 125  
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp  
 130 135 140

<210> 2563  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

<400> 2563  
 ggatcccaga cgagtgtctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc  
 60  
 accccgggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt  
 120  
 aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacaa agaattcttt  
 180  
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctgggtg  
 240  
 cactacacaa ggcagggcct ccagcgg  
 267

<210> 2564  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 2564  
 Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr  
 1 5 10 15  
 Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr  
 20 25 30  
 Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln  
 35 40 45  
 Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser  
 50 55 60  
 Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val  
 65 70 75 80  
 His Tyr Thr Arg Gln Gly Leu Gln Arg  
 85

<210> 2565  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 2565  
 ctctgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg  
 60  
 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccgccgat  
 120  
 gggccgggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc  
 180  
 gacatcggcc agttgcagca actcgggtgtc tccgatgtgg tcgatctgcg ttccacctat  
 240  
 gaggtggcca gcgagggccc ggggccgtg accgggcgtg ggggtgacct ccacccccat  
 300  
 tccttcctgc ccgaccagca cgccaatgtg cac  
 333

<210> 2566  
 <211> 111  
 <212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1           5           10           15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
          20           25           30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
          35           40           45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
          50           55           60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65           70           75           80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
          85           90           95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
          100          105          110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

```

ngaattcaaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcggttttaga
60
agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tggtgacgat gtaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

```

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1           5           10           15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
          20           25           30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
          35           40           45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
          50           55           60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

65					70					75				80	
Gly	His	Val	Trp	Gly	Pro	Ser	Thr	Glu	Thr	Gln	Leu	Gly	Asn	Thr	Leu
				85					90					95	
Ile	Gly	Gly	Val	Val	Gly	Val	Arg	Gly	Met	Val	Gly	Asp	Asp	Val	Asn
			100					105					110		
Tyr	Asp	Val	Ser	Leu	Gly	Thr	Pro	Ile	Lys	Lys	Pro	Glu	Gly	Phe	Asp
		115					120					125			
Thr	Asp	Thr	Arg												
		130													

&lt;210&gt; 2569

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2569

```

cttgctgctg gtgctgatgt gtccatgatt ggccagttcg gcgctcggttt ctactctgcc
60
tacctcgtcg ccgatagagt tgctgtgacc accaagcaca acgatgacga gcagtagctg
120
tgggagtccc aagcggggcgg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcaggggca ctaagatcac actgttcctc aaggacgatc agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
300
tggactgaaa agacaacaga gaaggaaatt
330

```

&lt;210&gt; 2570

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2570

Leu	Ala	Ala	Gly	Ala	Asp	Val	Ser	Met	Ile	Gly	Gln	Phe	Gly	Val	Gly
1				5					10					15	
Phe	Tyr	Ser	Ala	Tyr	Leu	Val	Ala	Asp	Arg	Val	Val	Val	Thr	Thr	Lys
			20					25					30		
His	Asn	Asp	Asp	Glu	Gln	Tyr	Val	Trp	Glu	Ser	Gln	Ala	Gly	Gly	Ser
		35					40					45			
Phe	Thr	Val	Thr	Arg	Asp	Thr	Ser	Gly	Glu	Gln	Leu	Gly	Arg	Gly	Thr
	50					55					60				
Lys	Ile	Thr	Leu	Phe	Leu	Lys	Asp	Asp	Gln	Leu	Glu	Tyr	Leu	Glu	Glu
65					70				75					80	
Arg	Arg	Leu	Lys	Asp	Leu	Val	Lys	Lys	His	Ser	Glu	Phe	Ile	Ser	Tyr
			85					90					95		
Pro	Ile	Ser	Leu	Trp	Thr	Glu	Lys	Thr	Thr	Glu	Lys	Glu	Ile		
			100					105					110		

&lt;210&gt; 2571

&lt;211&gt; 335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 2571

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 335

&lt;210&gt; 2572

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
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Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
			20					25					30		
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
		35					40					45			
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
	50					55					60				
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65					70					75				80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
				85					90					95	
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
				100				105						110	

&lt;210&gt; 2573

&lt;211&gt; 460

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2573

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<210> 2574  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2574  
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 20 25 30  
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 35 40 45  
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn  
 50 55 60  
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly  
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 85 90 95  
 Gly Gly Asp Glu Gly Glu Gly Ile Val  
 100 105

<210> 2575  
 <211> 3954  
 <212> DNA  
 <213> Homo sapiens

<400> 2575  
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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
			35				40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
	65				70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85				90						95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
	130					135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
	145				150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165				170						175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
			180				185						190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195					200					205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
	210					215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
	225				230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
				245				250					255		
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260				265						270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275				280						285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
		290				295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
	305				310				315					320	
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
				325				330						335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
			340				345						350		
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355 360 365  
 Leu Asp Val Val Ala Gly Ser Val Thr Val Leu Ser Gly Arg Arg Gly  
 370 375 380  
 Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr  
 385 390 395 400  
 Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser  
 405 410 415  
 Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro  
 420 425 430  
 Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln  
 435 440 445  
 Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu  
 450 455 460  
 Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln  
 465 470 475 480  
 Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile  
 485 490 495  
 Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg  
 500 505 510  
 Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg  
 515 520 525  
 Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp  
 530 535 540  
 Arg Val Asp Ala Gln Asp Glu Thr Ala Ala Glu Phe Thr Leu Arg Leu  
 545 550 555 560  
 Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala  
 565 570 575  
 His Gly Asp Glu Gly Cys Gly Ala Cys Gly Gly Val Gln Glu Glu Leu  
 580 585 590  
 Gly Arg Leu Arg Asp Gly Val Glu Arg Cys Ser Cys Pro Leu Leu Pro  
 595 600 605  
 Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly  
 610 615 620  
 Pro Leu Asp Gly Phe Ser Val Phe Gly Gly Ser Ser Gly Ser Ala Leu  
 625 630 635 640  
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 675 680 685  
 Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu  
 690 695 700  
 Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys  
 705 710 715 720  
 Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg  
 725 730 735  
 Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser  
 740 745 750  
 Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr  
 755 760 765  
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<210> 2578
<211> 100
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 2578

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Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
      20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
      35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
      50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
      85           90           95
Ser Asn Arg Pro
      100

```

&lt;210&gt; 2579

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2579

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180
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420

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&lt;210&gt; 2580

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2580

```

Xaa Met Ile Phe Arg Ser Cys Ile Asn Leu Ala Ala Phe Ile Ile Ile
 1           5           10           15
Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
      20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
      35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
      50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

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			85					90				95			
Leu	Asn	Pro	Ile	Leu	Tyr	Thr	Leu	Thr	Thr	Arg	Pro	Phe	Lys	Glu	Met
			100					105					110		
Ile	His	Arg	Phe	Trp	Tyr	Asn	Tyr	Arg	Gln	Arg	Lys	Ser	Met	Asp	Ser
		115					120					125			
Lys	Gly	Gln	Lys	Thr	Glu	Ala	Gly	Val	Cys	Ser	Arg				
	130					135					140				

&lt;210&gt; 2581

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2581

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120
cagtttgat accaggccca ttccctcgac aagattgaga tcattggacg cattctgcag
180
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360
accgatgtcg ctgcccgtgg cattgacgtc accgggggtgt cccacgtcat caaccatgaa
420
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459

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&lt;210&gt; 2582

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2582

Met	Leu	Phe	Ser	Ala	Thr	Met	Pro	Ala	Pro	Ile	Met	Ala	Leu	Ala	Arg
1				5					10					15	
Ser	Gln	Leu	Arg	Arg	Pro	Val	His	Val	Arg	Ala	Glu	Gly	Ala	Asp	Thr
			20					25					30		
Gln	Thr	Thr	Val	Pro	Asp	Thr	Gln	Gln	Phe	Val	Tyr	Gln	Ala	His	Ser
		35					40					45			
Leu	Asp	Lys	Ile	Glu	Ile	Ile	Gly	Arg	Ile	Leu	Gln	Ala	Asn	Asp	Val
	50					55					60				
Glu	Lys	Val	Ile	Ile	Phe	Cys	Arg	Thr	Lys	Arg	Ala	Cys	Gln	Arg	Leu
65					70					75				80	
Ser	Asp	Asp	Leu	Asp	Asp	Arg	Gly	Phe	Lys	Thr	Arg	Ala	Ile	His	Gly
			85					90					95		
Asp	Leu	Thr	Gln	Val	Ala	Arg	Glu	Lys	Ala	Leu	Lys	Lys	Phe	Arg	His
			100					105					110		
Gly	Glu	Ala	Thr	Ile	Leu	Val	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Ile
		115				120						125			
Asp	Val	Thr	Gly	Val	Ser	His	Val	Ile	Asn	His	Glu	Cys	Pro	Glu	Asp

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 Glu Lys Thr Tyr Val His Arg Ile Gly  
 145 150

<210> 2583  
 <211> 7098  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 2584

&lt;211&gt; 1186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2584

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Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp

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Asp Gly Glu Asp Val Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu		
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Glu Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His		160
	165	170
Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp		175
	180	185
Glu Tyr Asp Asn Tyr Asp Glu Leu Val Ala Lys Ser Leu Leu Asn Leu		190
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Gly Lys Ile Ala Glu Asp Ala Ala Tyr Arg Ala Arg Thr Glu Ser Glu		205
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Met Asn Ser Asn Thr Ser Asn Ser Leu Glu Asp Asp Ser Asp Lys Asn		220
225	230	235
Glu Asn Leu Gly Arg Lys Ser Glu Leu Ser Leu Asp Leu Asp Ser Asp		240
	245	250
Val Val Arg Glu Thr Val Asp Ser Leu Lys Leu Leu Ala Gln Gly His		255
	260	265
Gly Val Val Leu Ser Glu Asn Met Asn Asp Arg Asn Tyr Ala Asp Ser		270
	275	280
Met Ser Gln Gln Asp Ser Arg Asn Met Asn Tyr Val Met Leu Gly Lys		285
	290	295
Pro Met Asn Asn Gly Leu Met Glu Lys Met Val Glu Glu Ser Asp Glu		300
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Glu Val Cys Leu Ser Ser Leu Glu Cys Leu Arg Asn Gln Cys Phe Asp		320
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Gln Asn Met Asn Ile Arg Gln His Val Arg Pro Glu Glu Asp Phe Pro		350
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Gly Arg Thr Pro Asp Arg Asn Tyr Ser Asp Met Leu Asn Leu Met Arg		365
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Lys Glu Asp Gly Cys His Glu Arg Asp Asp Asp Thr Thr Ser Val Asn		400
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Ser Asp Arg Ser Glu Glu Val Phe Asp Met Thr Lys Gly Asn Leu Thr		415
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Leu Leu Glu Lys Ala Ile Ala Leu Glu Thr Glu Arg Ala Lys Ala Met		430
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Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser		445
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Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp		495
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&lt;210&gt; 2585

&lt;211&gt; 542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2585

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gggcctctag cctcaaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat  
240  
taagtcatgt catcctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc  
300  
atccccggga ggagtgggtg ggatgcgcgc tgaccctggg ccacctgggt gcagcatctg  
360  
tgttgatgac caccctctg cctcaggctt tgctcctgaa tgttcttgct ctctaggtct  
420  
gtccgctcct ggccctgctc ttcttaactc cgttcaagcc ccctgggtca cacgtccatg  
480  
ctcatcactt caatgacgcg gatgctggcg atccccaat ctcctaatacc aagtgcagat  
540  
ct  
542

<210> 2586  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 2586  
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro  
 1 5 10 15  
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser  
 20 25 30  
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser  
 35 40 45  
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly  
 50 55 60  
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val  
 65 70 75 80  
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr  
 85 90 95  
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro  
 100 105 110  
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu  
 115 120

<210> 2587  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2587  
 ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag  
 60  
 gcccgaggcg ctggagaccg catggatgag gtcataaagg aggtgccgcg cgcttcgtaag  
 120  
 gatgccggct acccgccgct ggtcaccgct tcgtcccaga tcgtgggaac ccaggcggtg  
 180  
 ttcaacgtct tgatgggcaa tggcttcgtac aagaatctca ctgccgagtt tgccgacctc  
 240  
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc  
 300  
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag  
 360  
 tgggatcagt tggctcgagca ggccaagagt cttgagggtc tcgacggctc cgacgaggac  
 420  
 gttcttacca acgcg  
 435

<210> 2588  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2588  
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

1                      5                      10                      15  
 Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met  
                     20                      25                      30  
 Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val  
                     35                      40                      45  
 Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu  
                     50                      55                      60  
 Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu  
 65                      70                      75                      80  
 Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile  
                     85                      90                      95  
 Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg  
                     100                      105                      110  
 Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala  
                     115                      120                      125  
 Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn  
                     130                      135                      140  
 Ala  
 145

<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc  
 60  
 ggcgatccgg ttgagcagat cagagcgctg accagggggcc gcggcgctcga tttcgcgac  
 120  
 gaggtcgtcg gcatcgctcga ggtcatggag caggcctact gggcgggcgcg acgcgggcggc  
 180  
 acgatcgtct acgtcggggc gctgggcatc gacgccaagc tggctcctgcc ggcgaacgac  
 240  
 ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattgggcgc agtgcgccacc  
 300  
 gactatgccca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgatc  
 360  
 acgcgt  
 366

<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val  
 1                      5                      10                      15  
 Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg  
                     20                      25                      30  
 Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val  
                     35                      40                      45  
 Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

      50      55      60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65      70      75      80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85      90      95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100      105      110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115      120

```

<210> 2591  
 <211> 341  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tctctgtcca gggcaggccc tgggcagggc aatgctgggg acacggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag ggttgaggtt acatgaggga
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

```

<210> 2592  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20      25      30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35      40      45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50      55      60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65      70      75      80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85      90      95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100      105

```

<210> 2593  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg  
 60  
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat ttcggtacc  
 120  
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc  
 180  
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg  
 240  
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa  
 300  
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg  
 360  
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat  
 420  
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca  
 480  
 gctgagatgt ctcttaagct t  
 501

&lt;210&gt; 2594

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10					15	
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50				55					60					
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65				70				75					80		
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85				90						95		
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
		100					105					110			
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
	115				120						125				
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
	130				135					140					
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145				150					155					160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									
				165											

&lt;210&gt; 2595

&lt;211&gt; 928

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2595  
 agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatgggtg gcccctgcct  
 60  
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg  
 120  
 gtcacaattt ctggggctca ctcatataac accaacaaat gggatatttg tgaagaactt  
 180  
 cgcttgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg  
 240  
 tgggtggctcg actgcactgc caactggaga gaaaaatgga gttaaagtctg agctgaaagg  
 300  
 aacagtgcgg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa  
 360  
 tcggatccac tgaacagaa acagagtttg ccacttcaga aggaggcatt agaagctaata  
 420  
 gttacccagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa  
 480  
 tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt  
 540  
 tctacaaagg aggacacaaa taataaggaa caagggtgtg ttattgattc tctaaaatta  
 600  
 agtgaggaga tgaagcccaa tctagatggg gttgatttat tcaacaatgg tggttctgga  
 660  
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa  
 720  
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag  
 780  
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct  
 840  
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt  
 900  
 gacattcttc ttggtcaaca taatgatg  
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596  
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp  
 1 5 10 15  
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His  
 20 25 30  
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser  
 35 40 45  
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu  
 50 55 60  
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg  
 65 70 75 80  
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val  
 85 90 95  
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

```
<400> 2597
ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc tttaacaagt tttgggcaag agtggtatgg ctgacctggg
240
gtctctgggaa ggaactgtgt ggggatgggtg tgcaggactt acctaggggtg ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaa
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtgagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccaggggt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccaggggtgga agcgggtggg
600
```

tcactccacg agtgctatatt cacttacgcg t  
631

<210> 2598  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2598  
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg  
1 5 10 15  
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn  
20 25 30  
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser  
35 40 45  
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp  
50 55 60  
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg  
65 70 75 80  
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg  
85 90 95  
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg  
100 105

<210> 2599  
<211> 356  
<212> DNA  
<213> Homo sapiens

<400> 2599  
nagatcttat acagggacgt gatgttggag aactactgga accttgtttc tctgggactg  
60  
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg  
120  
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc  
180  
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca  
240  
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt  
300  
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn  
356

<210> 2600  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2600  
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val  
1 5 10 15  
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu  
20 25 30  
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg



```

          35          40          45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
      50          55          60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
65          70          75          80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
          85          90          95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
          100          105          110
Glu Cys Gln Trp Arg Asp
          115

```

&lt;210&gt; 2601

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2601

```

gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcâtcgcc
60
tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
120
gtcaccgcct tcggettgcg ccacaacccc aaggacactg cgcgcatgcy ccgcgaaggc
180
ttgatcgctt tgcccgaaga cctcggtatc cgccgcaccg acgccaccgc cgaactgttg
240
gccgccaaga gcgtggccga cctggtggag tggtcgggtg gcttgtgcaa cccgcccgcg
300
aagttcagga gctggtaaât gcgcgcct
329

```

&lt;210&gt; 2602

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2602

```

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
1          5          10          15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
          20          25          30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
          35          40          45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
          50          55          60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
65          70          75          80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
          85          90          95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
          100          105

```

&lt;210&gt; 2603

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2603

```

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccagggtcg gtggtcagga
60
gcatcgggttc ggtgggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
120
ggttgtggta agtgggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
180
agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
240
tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc
300
gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac
360
cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgctcg
420
cgg
423

```

&lt;210&gt; 2604

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2604

```

Met Glu Ile Ile Phe Thr Ala Lys Glu Ile Lys Arg Ile Ile Asp Ala
1      5      10      15
Cys Lys Ile Leu Tyr Asp Asn Glu Gly Tyr Ala Ile Ile Ser Glu Ile
20      25      30
Gly Leu Val Ser Gly Val Asp Arg Val Val Ser Ala Thr Ala Gln Gly
35      40      45
Asn Gln Ser Phe Asp Phe Thr Glu Val Ile Ser Ala Gln Ile Val Ala
50      55      60
His Leu Thr Thr Tyr His Asn Leu Pro Ser Ala Asn Asn Gly Val Lys
65      70      75      80
Glu Val Leu Asp Leu Gly Thr Thr Glu Pro Met Leu Leu Thr Thr Asp
85      90      95
Leu Gly Val Gly Ala Gln Pro
100

```

&lt;210&gt; 2605

&lt;211&gt; 354

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2605

```

ngggaggggag ggcattgtcaa aagcgactgt atccagaggg tttgatttaa acatttttca
60
aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc
120
tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggagaa
180

```

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc  
 240  
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat  
 300  
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagg  
 354

<210> 2606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2606

Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln  
 1 5 10 15  
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe  
 20 25 30  
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys  
 35 40 45  
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val  
 50 55 60  
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro  
 65 70 75 80  
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met  
 85 90 95  
 Gly His Pro Gly Leu  
 100

<210> 2607

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2607

tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg  
 60  
 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg  
 120  
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaaccacaa attcccacca  
 180  
 cacggggggcc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa  
 240  
 actttttttt ttttaannnn anacccccaa aaaaaccacaa aaaaaaaatt taaaaaa  
 297

<210> 2608

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2608

Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu  
 1 5 10 15  
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

```

                20                25                30
Arg Pro Glu Trp Met Thr Trp Thr Glu Pro Arg Arg Lys Lys Ala Gly
          35          40          45
Met Cys Lys Pro Lys Phe Pro Pro His Gly Gly Pro Asn Asn Trp Ile
    50          55          60
His Pro Xaa Lys Xaa Pro Xaa Gln Lys Lys Xaa Lys Thr Phe Phe Phe
65          70          75          80
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys Lys Phe Lys Lys
          85          90          95

```

<210> 2609  
 <211> 305  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2609
ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgatc cctatccgct catctggaga cccatgcgtt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctcgcatctg
180
tgaaagtctt acctcggggg cgtcattctcg gctgtcatcg tcggcaaata actcagctgg
240
ccgtaccctt cgtcattcgcc cggggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

```

<210> 2610  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2610
Met Met Ser Gly Lys Asp Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
1          5          10          15
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
          20          25          30
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Phe Pro Pro
          35          40          45
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
          50          55          60
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
65          70          75          80
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
          85          90          95
Thr Thr

```

<210> 2611  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2611

gcccgcgcga tcgacggcga ctctcgcacc agctgggtgt ccagctcgct gcaaaccgct  
 60  
 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcaccctg  
 120  
 acgcccagcg ccaccgctgt cggagctcag gtgcgccgcy tcgaggtggc aacagccaac  
 180  
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 240  
 ggcgagacct catgggtccg gttcaccgcy accggcaccg acgacggctc ccccgcgctg  
 300  
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg  
 342

&lt;210&gt; 2612

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2612

Ala	Ala	Ala	Ile	Asp	Gly	Asp	Ser	Ser	Thr	Ser	Trp	Val	Ser	Ser	Ser
1				5					10					15	
Leu	Gln	Thr	Ala	Val	Gly	Gln	Trp	Leu	Gln	Val	Asp	Phe	Asp	His	Pro
		20					25					30			
Val	Thr	Asn	Ala	Thr	Ile	Thr	Leu	Thr	Pro	Ser	Ala	Thr	Ala	Val	Gly
		35				40						45			
Ala	Gln	Val	Arg	Arg	Val	Glu	Val	Ala	Thr	Ala	Asn	Gly	Thr	Ser	Thr
		50				55					60				
Ile	Arg	Phe	Asp	Gln	Pro	Gly	Lys	Pro	Leu	Thr	Ala	Ala	Leu	Pro	Tyr
65					70				75					80	
Gly	Glu	Thr	Ser	Trp	Val	Arg	Phe	Thr	Ala	Thr	Gly	Thr	Asp	Asp	Gly
			85					90					95		
Ser	Pro	Gly	Val	Gln	Phe	Gly	Ile	Thr	Asp	Phe	Ser	Val	Thr	Gln	Tyr
			100					105					110		

Asp Ala

&lt;210&gt; 2613

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2613

acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggccctgggcc ctgggcatca  
 60  
 ttctcctcct ccaaaagggtg agggctctgac ctaatggtag tttgtctgat gttttccaga  
 120  
 tatgccocta ctgggaaggg ccaagtgggc aggcagagtc tggggtggag cgaggtgggg  
 180  
 ctgggaagca ctctgctttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc  
 240  
 ctctcctctg gaggaggaaa ggagggctcg cctccaggtc tcaggctgag ggagtgggct  
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact  
 360  
 ctggggcccc tcccaggctc tcctcgtggc aggcaggac ttgggccagc atgg  
 414

<210> 2614  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 2614  
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 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser  
 20 25 30  
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu  
 35 40 45  
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg  
 50 55 60  
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala  
 65 70 75 80  
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser  
 85 90 95  
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp  
 100 105

<210> 2615  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2615  
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 120  
 aacaatgcgg gcgtcacgca tgcggccgat ttcctcgacg tgtgcgaaga cgatttcgac  
 180  
 cgggtcatgc gcattaacct gaaatcgatg ttcctgtgcg gccaggccgc ggcgcgcgag  
 240  
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc  
 300  
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc  
 360  
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 394

<210> 2616  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 2616  
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```

      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

```

&lt;210&gt; 2617

&lt;211&gt; 513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2617

```

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agacattgtg agatgggaaa tatcatggaa acacctatac tttccggctc ccacttgaac
120
gtcaccttgg gaaatcacaa gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttggccc caacggttct gggaagacca ccctggtacg cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tccgcatact gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccg atcgacgcgt caccactctc tca
513

```

&lt;210&gt; 2618

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2618

```

Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
      1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

          35          40          45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
          50          55          60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
65          70          75          80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
          85          90          95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
          100          105          110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
          115          120          125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
          130          135          140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
145          150          155          160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
          165          170

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<210> 2619  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

```

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cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcggggcggtc acccttacgg ctcggtgtac cccggggccga ttggtgcggg gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

<210> 2620  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
1          5          10          15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
          20          25          30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
          35          40          45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
          50          55          60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
65          70          75          80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```



	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
	100						105						110		
Leu	Pro	Tyr	Ala												
	115														

<210> 2621  
 <211> 1485  
 <212> DNA  
 <213> Homo sapiens

<400> 2621  
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 120  
 ttttctttcc ctgttttgat tttgctgaag ggagaggtgg tggtaggttag gatcagagct  
 180  
 ctctggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac  
 240  
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 300  
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 420  
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 1380  
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 1440  
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<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
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Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20				25					30			
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
		35				40					45				
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50				55					60					
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65				70				75					80		
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 120  
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcgcc  
 180  
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 240  
 acctttcccc agggatatgt tatgttcaac caccgtcttc cccgggtcac cagcttcacc  
 300  
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 540  
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga  
 600

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660  
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720  
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 3524

&lt;210&gt; 2624

&lt;211&gt; 895

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2624

Met Lys Ile Gly Ser Gly Phe Leu Ser Gly Gly Gly Gly Thr Gly Ser  
 1 5 10 15  
 Ser Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly

				20					25					30		
Gly	Gly	Ser	Ser	Gly	Arg	Arg	Ala	Glu	Met	Glu	Pro	Thr	Phe	Pro	Gln	
		35					40					45				
Gly	Met	Val	Met	Phe	Asn	His	Arg	Leu	Pro	Pro	Val	Thr	Ser	Phe	Thr	
	50					55					60					
Arg	Pro	Ala	Gly	Ser	Ala	Ala	Pro	Pro	Pro	Gln	Cys	Val	Leu	Ser	Ser	
65					70					75					80	
Ser	Thr	Ser	Ala	Ala	Pro	Ala	Ala	Glu	Pro	Pro	Pro	Pro	Pro	Ala	Pro	
				85					90					95		
Asp	Met	Thr	Phe	Lys	Lys	Glu	Pro	Ala	Ala	Ser	Ala	Ala	Ala	Phe	Pro	
			100					105					110			
Ser	Gln	Arg	Thr	Ser	Trp	Gly	Phe	Leu	Gln	Ser	Leu	Val	Ser	Ile	Lys	
		115					120					125				
Gln	Glu	Lys	Pro	Ala	Asp	Pro	Glu	Glu	Gln	Gln	Ser	His	His	His	His	
	130					135					140					
His	His	His	His	Tyr	Gly	Gly	Leu	Phe	Ala	Gly	Ala	Glu	Glu	Arg	Ser	
145					150					155					160	
Pro	Gly	Leu	Gly	Gly	Gly	Glu	Gly	Gly	Ser	His	Gly	Val	Ile	Gln	Asp	
				165					170					175		
Leu	Ser	Ile	Leu	His	Gln	His	Val	Gln	Gln	Gln	Pro	Ala	Gln	His	His	
			180					185					190			
Arg	Asp	Val	Leu	Leu	Ser	Ser	Ser	Ser	Arg	Thr	Asp	Asp	His	His	Gly	
		195					200					205				
Thr	Glu	Glu	Pro	Lys	Gln	Asp	Thr	Asn	Val	Lys	Lys	Ala	Lys	Arg	Pro	
	210					215					220					
Lys	Pro	Glu	Ser	Gln	Gly	Ile	Lys	Ala	Lys	Arg	Lys	Pro	Ser	Ala	Ser	
225					230					235					240	
Ser	Lys	Pro	Ser	Leu	Val	Gly	Asp	Gly	Glu	Gly	Ala	Ile	Leu	Ser	Pro	
				245					250					255		
Ser	Gln	Lys	Pro	His	Ile	Cys	Asp	His	Cys	Ser	Ala	Ala	Phe	Arg	Ser	
			260					265					270			
Ser	Tyr	His	Leu	Arg	Arg	His	Val	Leu	Ile	His	Thr	Gly	Glu	Arg	Pro	
		275					280					285				
Phe	Gln	Cys	Ser	Gln	Cys	Ser	Met	Gly	Phe	Ile	Gln	Lys	Tyr	Leu	Leu	
	290					295					300					
Gln	Arg	His	Glu	Lys	Ile	His	Ser	Arg	Glu	Lys	Pro	Phe	Gly	Cys	Asp	
305					310					315					320	
Gln	Cys	Ser	Met	Lys	Phe	Ile	Gln	Lys	Tyr	His	Met	Glu	Arg	His	Lys	
				325					330					335		
Arg	Thr	His	Ser	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asp	Thr	Cys	Gln	Gln	
			340					345					350			
Tyr	Phe	Ser	Arg	Thr	Asp	Arg	Leu	Leu	Lys	His	Arg	Arg	Thr	Cys	Gly	
		355					360					365				
Glu																

450 455 460  
 Leu Ile Phe Lys Lys Gly Ser Arg Lys Asn Thr Asp Lys Asn Tyr Leu  
 470 475 480  
 Asn Phe Val Ser Pro Leu Pro Asp Ile Val Gly Gln Lys Ser Leu Ser  
 485 490 495  
 Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu  
 500 505 510  
 Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser  
 515 520 525  
 Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu  
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 Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met  
 545 550 555 560  
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&lt;211&gt; 1398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2625

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<400> 2628  
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Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
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Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
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Phe Leu Cys Ile Pro Pro Pro Leu His Ala
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&lt;210&gt; 2629

&lt;211&gt; 650

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2629

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&lt;210&gt; 2630

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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<210> 2636



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Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
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Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
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Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
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<212> DNA

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<212> PRT

<213> Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2643

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<211> 871

<212> PRT

<213> Homo sapiens

<400> 2644

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Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
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Glu	Cys	Glu	Gln	Gly	Phe	Asp	Arg	Asn	Ala	Ser	Leu	Ser	Val	Tyr	Pro
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Lys	Thr	His	Thr	Gly	Tyr	Lys	Phe	Tyr	Val	Cys	Asn	Glu	Tyr	Gly	Thr
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 Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His  
 740 745 750  
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 Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys  
 770 775 780  
 Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn

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    805                                      810                                      815  
 Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His  
    820                                      825                                      830  
 Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln  
    835                                      840                                      845  
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<210> 2645

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 2645

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<210> 2648

<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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Ala	Tyr	Lys	Asn	Ala	Met	Thr	Glu	Leu	Lys	Lys	Lys	Ser	His	Phe	Gly
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Phe	Phe	Asp	Ala	Val	Glu	Ala	Ala	Leu	Asp	Arg	Gln	Asp	Lys	Ile	Glu
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Glu	Gln	Ser	Gln	Ser	Glu	Lys	Val	Arg	Leu	His	Trp	Pro	Thr	Ser	Leu

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&lt;210&gt; 2649

&lt;211&gt; 1299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2649

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<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35				40					45				
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50				55					60					
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
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Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
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Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
			100					105					110		
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
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      130              135              140
Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu
145              150              155              160
Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu
      165              170              175
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val
      180              185              190
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr
      195              200              205
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys
      210              215              220
Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys
225              230              235              240
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser
      245              250              255
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala
      260              265              270
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser
      275              280              285
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg
      290              295              300
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly
305              310              315              320
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val
      325              330              335
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys
      340              345              350
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly
      355              360              365
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp
      370              375              380
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile
385              390              395              400
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys
      405              410              415
His Phe Ser Gly Arg Val Glu Met His Val His Pro
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&lt;210&gt; 2651

&lt;211&gt; 628

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2651

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gagacaggcc gagtgaccaa gacaaaggac gggcatgagg ttcggacctg caaagtggcg
180
gacaaaacag gcagcatcaa tatctctgtc tgggacgatg ttggcaatct gatccagcct
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ggggacatta tccggctcac caaagggtac gcttcagttt tcaaagggtg tctgacacta
300

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tatactggcc gtgggggtga tctgcagaag attggagaat tctgcatgga ttattctgag  
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 420  
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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35				40						45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55					60				
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70					75				80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
	130					135					140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
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Leu

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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180  
gctgttttcg acttcagaaa ggatctagcc tcagcacaga agcgccctcag gcgcggcgca  
240  
aagctcgagc ggacggcggg ggcgcccgga gcctctctcg ggggagccgc gcctgaggag  
300  
gcggaagaac cccctgacg cgactggcgt gtgcttctgc ccgccaccgc ccctcccgt  
360  
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420  
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720  
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780  
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1140  
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 1860  
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 1920  
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 1980  
 aactgagtt ctgattctaa atgccttctt ctgctgggcg cgggtggctca tgcctgtaat  
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 2103

<210> 2654  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 2654  
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 Ser Asp Ser Lys Cys Leu Leu Leu Gly Ala Val Ala His Ala Cys  
 35 40 45  
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly  
 50 55 60  
 Asp Arg Asp Tyr Pro Gly  
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<210> 2655  
 <211> 1752  
 <212> DNA  
 <213> Homo sapiens

<400> 2655  
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 tcttctttgt gattgctttt ttagagacgg atttttttcc agatttggtgc ttcttgtgtt  
 180  
 ttgctttttt tttgatgatc aataacttat tctggatctc aggtttgtaa gacttgaatg  
 240  
 caagagaatg aagaccttca cgctttctct gtaagttttc attcaaaaca tctttcaatt  
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 tctttttttt cttttttctt ttttttgccc tcattttagt tagtttgagt ttcttgtggc  
 360

tctgtagtga ctgctctaata agaatatccc ttacaacttt gtggcagtta atttctggat  
420  
gatcactgtg acttccattt acatgtattt ggcaagattt tagagtattt tcttttaatg  
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720  
tagcaggaca gcaagctgga tcaaaattat tttcctgctc tttcttgaag gaagagggca  
780  
ggctatctct gctacatcta tgttctccat tacttgact aacatagtca cacttcaatt  
840  
tctccaattt aatccgaggt actctttgta ttttaatggg tgggaattgga aattctggg  
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1320  
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1752

&lt;210&gt; 2656

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2656

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Met Glu Thr Met Trp Glu Ile Pro Ala Ile Gly His Phe Leu Cys Leu
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Ala Gln Gln Ile Leu Asn Leu Pro Glu Ile Val Phe Tyr Glu Leu Glu
 20           25           30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
 35           40           45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
 50           55           60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
 65           70           75           80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
 85           90           95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
 100          105          110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
 115          120          125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
 130          135          140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
 145          150          155          160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
 165          170          175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
 180          185          190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
 195          200          205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
 210          215          220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
 225          230          235          240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
 245          250          255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
 260          265          270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
 275          280          285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
 290          295          300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
 305          310          315          320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
 325          330          335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
 340          345          350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
 355          360          365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
 370          375          380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Asp Val Leu Asn
 385          390          395          400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
 405          410          415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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<210> 2658
<211> 76
<212> PRT
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<213> Homo sapiens

<400> 2658

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Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
      20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
      35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagagggtgg aggccctccc gagggccggt cgcagaacc tgccacagcc acagatgcca
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tcgggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc cgtacgtgc cccctctgcc caacgtgcgg
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10           15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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<210> 2661
<211> 1395
<212> DNA
<213> Homo sapiens
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120
gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg
180
aatcaccgat ctcttatact cctggatgaa tgcagtaagg tggctctaga taatatccat
240
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360
ttcagaaaag ttctttttat cctcatttta tttgaaaacc ttggctttcg acctgttggt
420
ttaatggacc tgtttatgaa gagaatagta gaggatcctg aatccctaaa catgaaaaac
480
attctatcta ttcttcatac ttactcttct ctcaatcatg tctacaaatg ccagaacaaa
540
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960
caagtgtac cactttctga tgtggataca acttctgcta cagatattca aagagtagct
1020

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 1140  
 gagatggaca aactagagat ggaagatgca gtcacatttt tgaagactaa aatctattca  
 1200  
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 1260  
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 1380  
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
			35				40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
			50			55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65					70					75				80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
				85					90					95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
			115				120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
			130			135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145					150					155				160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
				165					170					175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
			195				200					205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
			210			215					220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225					230					235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
				245					250					255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

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<210> 2663
<211> 1024
<212> DNA
<213> Homo sapiens
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840

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<210> 2664  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 2664  
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
 35 40 45  
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn  
 50 55 60  
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
 65 70 75 80  
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
 85 90 95  
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
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 115 120 125  
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
 130 135 140  
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
 145 150 155 160  
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
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 Ser Gly Ser His Lys Arg Ser  
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<210> 2665  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

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 180

atgcctgcac tgtaagggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt  
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 420  
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 480  
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 600  
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 720

&lt;210&gt; 2666

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20				25					30			
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
		35					40				45				
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
	50				55					60					
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65				70				75						80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85				90						95		
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
		100					105					110			
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
	115					120					125				
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
	130				135					140					
Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145					150										

&lt;210&gt; 2667

&lt;211&gt; 289

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2667

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 120  
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac  
 180  
 gagtgcgggc tccgcgggga gagctgcctt gtacactgcc tggccgggggt ctccaggagc  
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 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

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Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
		20						25				30			
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
	35						40				45				
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55				60					
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70				75					80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 180  
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 300  
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 420  
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 480  
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 540  
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gcagaaatTT atgagcaaca cgtcactaaa gtgaatgaag aggtagccaa acttcgtcgg  
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1320  
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2220



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&lt;210&gt; 2670

&lt;211&gt; 979

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2670

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Asp	Glu	Gln	Ser	Val	Glu	Ser	Ile	Ala	Glu	Val	Phe	Arg	Cys	Phe	Ile
			20					25					30		
Cys	Met	Glu	Lys	Leu	Arg	Asp	Ala	Arg	Leu	Cys	Pro	His	Cys	Ser	Lys
		35					40					45			
Leu	Cys	Cys	Phe	Ser	Cys	Ile	Arg	Arg	Trp	Leu	Thr	Glu	Gln	Arg	Ala
	50					55					60				
Gln	Cys	Pro	His	Cys	Arg	Ala	Pro	Leu	Gln	Leu	Arg	Glu	Leu	Val	Asn
65					70				75						80
Cys	Arg	Trp	Ala	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu	
			85					90					95		
Cys	Ser	Leu	Thr	Lys	His	Glu	Glu	Asn	Glu	Lys	Asp	Lys	Cys	Glu	Asn
			100					105					110		
His	His	Glu	Lys	Leu	Ser	Val	Phe	Cys	Trp	Thr	Cys	Lys	Lys	Cys	Ile
		115					120					125			
Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe
	130					135					140				
Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu
145					150					155					160
Glu	Val	Ala	Lys	Leu	Arg	Arg	Arg	Leu	Met	Glu	Leu	Ile	Ser	Leu	Val
			165					170						175	
Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu
			180					185					190		
Arg	Val	Arg	Glu	Ile	Arg	Asn	Ala	Val	Glu	Met	Met	Ile	Ala	Arg	Leu
		195				200						205			
Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr
	210					215						220			
Ser	Leu	Thr	Gln	Glu	Thr	Glu	Leu	Leu	Glu	Ser	Leu	Leu	Gln	Glu	Val
										235				240	
225				230											
Glu	His	Gln	Leu	Arg	Ser	Cys	Ser	Lys	Ser	Glu	Leu	Ile	Ser	Lys	Ser

					245						250				255	
Ser	Glu	Ile	Leu	Met	Met	Phe	Gln	Gln	Val	His	Arg	Lys	Pro	Met	Ala	
			260					265					270			
Ser	Phe	Val	Thr	Thr	Pro	Val	Pro	Pro	Asp	Phe	Thr	Ser	Glu	Leu	Val	
		275					280					285				
Pro	Ser	Tyr	Asp	Ser	Ala	Thr	Phe	Val	Leu	Glu	Asn	Phe	Ser	Thr	Leu	
	290					295					300					
Arg	Gln	Arg	Ala	Asp	Pro	Val	Tyr	Ser	Pro	Pro	Leu	Gln	Val	Ser	Gly	
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Leu	Cys	Trp	Arg	Leu	Lys	Val	Tyr	Pro	Asp	Gly	Asn	Gly	Val	Val	Arg	
				325					330					335		
Gly	Tyr	Tyr	Leu	Ser	Val	Phe	Leu	Glu	Leu	Ser	Ala	Gly	Leu	Pro	Glu	
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Thr	Ser	Lys	Tyr	Glu	Tyr	Arg	Val	Glu	Met	Val	His	Gln	Ser	Cys	Asn	
	355					360						365				
Asp	Pro	Thr	Lys	Asn	Ile	Ile	Arg	Glu	Phe	Ala	Ser	Asp	Phe	Glu	Val	
	370					375					380					
Gly	Glu	Cys	Trp	Gly	Tyr	Asn	Arg	Phe	Phe	Arg	Leu	Asp	Leu	Leu	Ala	
385					390					395					400	
Asn	Glu	Gly	Tyr	Leu	Asn	Pro	Gln	Asn	Asp	Thr	Val	Ile	Leu	Arg	Phe	
				405					410					415		
Gln	Val	Arg	Ser	Pro	Thr	Phe	Phe	Gln	Lys	Ser	Arg	Asp	Gln	His	Trp	
		420						425					430			
Tyr	Ile	Thr	Gln	Leu	Glu	Ala	Ala	Gln	Thr	Ser	Tyr	Ile	Gln	Gln	Ile	
	435					440						445				
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	450					455					460					
Ser	Arg	Asp	Leu	Ser	Pro	Pro	Asp	Asn	His	Leu	Ser	Pro	Gln	Asn	Asp	
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Asp	Ala	Leu	Glu	Thr	Arg	Ala	Lys	Lys	Ser	Ala	Cys	Ser	Asp	Met	Leu	
				485					490					495		
Leu	Glu	Gly	Gly	Pro	Thr	Thr	Ala	Ser	Val	Arg	Glu	Ala	Lys	Glu	Asp	
			500					505					510			
Glu	Glu	Asp	Glu	Glu	Lys	Ile	Gln	Asn	Glu	Asp	Tyr	His	His	Glu	Leu	
	515						520					525				
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	530					535					540					
Gln	Leu	Asp	Gly	Ser	Ser	Ser	Ser	Ala	Ser	Ser	Thr	Ala	Thr	Ser	Asn	
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Thr	Glu	Glu	Asn	Asp	Ile	Asp	Glu	Glu	Thr	Met	Ser	Gly	Glu	Asn	Asp	
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675 680 685  
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 705 710 715 720  
 Ser Gly Asp Met Gln Thr Ser Leu Phe Ser Ala Asp Gln Ala Ala Leu  
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 Ala Ala Cys Gly Thr Glu Asn Ser Gly Arg Leu Gln Asp Leu Gly Met  
 740 745 750  
 Glu Leu Leu Ala Lys Ser Ser Val Ala Asn Cys Tyr Ile Arg Asn Ser  
 755 760 765  
 Thr Asn Lys Lys Ser Asn Ser Pro Lys Pro Ala Arg Ser Ser Val Ala  
 770 775 780  
 Gly Ser Leu Ser Leu Arg Arg Ala Val Asp Pro Gly Glu Asn Ser Arg  
 785 790 795 800  
 Ser Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly Ser Pro Gly Ser Ser  
 805 810 815  
 Gln Ser Gly Ser Arg His Ser Ser Pro Arg Ala Leu Ile His Gly Ser  
 820 825 830  
 Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu  
 835 840 845  
 Asp Ser Asp Ala Val Val Val Ala Val Phe Ser Gly Leu Pro Ala Val  
 850 855 860  
 Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly  
 865 870 875 880  
 His Leu Glu Gly Leu Gln Met Thr Asp Leu Glu Asn Asn Ser Glu Thr  
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 900 905 910  
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 915 920 925  
 Glu Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp Ser Phe Met  
 930 935 940  
 Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser Phe Pro Asp  
 945 950 955 960  
 Gly Glu Gln Ile Gly Pro Glu Asp Leu Ser Phe Asn Thr Asp Glu Asn  
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&lt;210&gt; 2671

&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2671

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<211> 223

<212> PRT

<213> Homo sapiens

<400> 2672

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<213> Homo sapiens

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<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

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Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
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Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
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Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
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 Ser Gln His Gly Leu Asp Gly Lys Lys Gly Gly Ser Asn Leu Ile Pro  
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 Ser Ala

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&lt;210&gt; 2675

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2675

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&lt;210&gt; 2676

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2676

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 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Leu Gln Trp  
 50 55 60  
 Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu  
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 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe  
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 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys  
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 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

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Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
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Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
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Gly Leu Pro Val
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&lt;210&gt; 2677

&lt;211&gt; 735

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2677

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&lt;210&gt; 2678

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2678

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Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

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Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100          105          110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
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Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130          135          140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
145          150          155          160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165          170

```

&lt;210&gt; 2679

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2679

```

agccgcccc cctcctgttc cattataatc ttatttttgggt tatgttgata caacacaatc
60
tgtccttcca agtgatcacc ggagtccaga tattttctgtc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacaggggact ccaccaggcc atggagctca tcccacaaga
180
cgcctcaccg cacaggaggg ctgaccccag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgctgcag cagccagcag gccctggatg gccagggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctggggccag ttcgcgccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
agatcaacta actattcagg ttgaaccaga ggcttgggcg ggggcatcca actgcccacc
540
cgtcagactg agggacgcgt
560

```

&lt;210&gt; 2680

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2680

```

Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
1          5          10          15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

                20                25                30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
                35                40                45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
                50                55                60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
        65                70                75                80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
                85                90                95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
                100                105                110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
                115                120                125
Arg Leu Arg Asp Ala
                130

```

&lt;210&gt; 2681

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2681

```

gattctctag tagccctaatt tctacccatc tggctactaa ttcaaacttt cttccttcac
60
atctgtttgt ggacttctcc aatataacta gtatgcctgg gtcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atggggcaag ctcacaagc
180
cccgagggtc tgtggctgag gtgtacctg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc ttctctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacggt ccagatttgt ttccagtact aatgggtcat ctcttttttt ctgttcatcc
480
attttccttt tcctgtttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctt cttgtaactt ttcttctctc agctttctca agctt
585

```

&lt;210&gt; 2682

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1          5          10          15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
20          25          30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

      35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
      50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100          105          110
Met Val Met Lys
      115

```

<210> 2683  
 <211> 498  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2683
nacgcgttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
60
atcacctgga tggccaacca cactggaagg ttggatttca tctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtgtg gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca ccccccatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

<210> 2684  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2684
Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85      90      95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100      105      110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115      120      125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130      135      140
Cys Leu Phe Leu Ala
145

```

<210> 2685  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2685
ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaagggtcaag
60
cgcaatgagc tggctgccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcaagc cgggccctgg gccccctgc ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgttgagta tctgtacctg cagaataaca agattagcgc tgttcttgcc
300
agcgcccttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct
360
gtgggctccg tagtagaaag cgccttcgg a
391

```

<210> 2686  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2686
Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
20      25      30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35      40      45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50      55      60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65      70      75      80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85      90      95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100      105      110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115      120      125
Phe Arg

```



130

&lt;210&gt; 2687

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2687

nagtgcaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc  
 60  
 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga  
 120  
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct  
 180  
 gacagtccgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag  
 240  
 aaaagacagc aaatgataaa atattgctgg tttatttggg ctaaggaacc catcctgaaa  
 300  
 cctttggtct tttggccaca gttagggttg agcggggact ggatatgcca actcctaate  
 360  
 cagtatgtaa aggataaaaag tccagtttct caagaggag  
 399

&lt;210&gt; 2688

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1				5				10						15	
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
			35				40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50				55					60					
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70					75					80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
				85					90						

&lt;210&gt; 2689

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

gcacccattc aagttggggt agttggcttc tgtttggtgt ttgctacacc cctgtgttgt  
 60  
 gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc  
 120  
 tcaaactcct ggcctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag  
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc  
 240  
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc  
 300  
 tcattctgcc actgcaaagc tgggttagcc atgctggtga gaaaaatcct gttcaacctg  
 360  
 ggttggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg  
 420  
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa  
 480  
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc  
 540  
 gaaacaagcc atcacgccag  
 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

Ala	Pro	Ile	Gln	Val	Gly	Leu	Val	Gly	Phe	Cys	Leu	Val	Phe	Ala	Thr
1			5					10					15		
Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
		20						25					30		
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
		35				40						45			
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
65						70									

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

gatctcatct gtacacactt catggatggc atgaatgagc tggcgattgc ttacatcctg  
 60  
 cagggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc  
 120  
 aaagccagcc acatcctgat ctctgtggat gggaaggtct acctgtctgg tttgcgcagc  
 180  
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac  
 240  
 agtgtcaagg ttctgccgtg gctcagcccc gaggtcctcc agcagaatct ccagggttat  
 300  
 gatgccaaagt ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat  
 360  
 gtccccttta aggatatgcc tgccaccag atgctgctag agaaactgaa cggcacagtg  
 420  
 ccctgcctgt tggataaccag caccatcccc gctgaggagc tgaccatgag cccttcgcgc  
 480

tcagtggcca actctggcct gagtgcacagc ctgaccacca gcacaccccg gg  
532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp	Leu	Ile	Cys	Thr	His	Phe	Met	Asp	Gly	Met	Asn	Glu	Leu	Ala	Ile
1				5					10					15	
Ala	Tyr	Ile	Leu	Gln	Gly	Val	Leu	Lys	Ala	Leu	Asp	Tyr	Ile	His	His
			20					25					30		
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
			35				40					45			
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
	50					55				60					
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
65					70					75				80	
Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
			85					90					95		
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
			100					105					110		
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
			115				120					125			
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
			130			135					140				
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
145					150					155				160	
Ser	Val	Ala	Asn	Ser	Gly	Leu	Ser	Asp	Ser	Leu	Thr	Thr	Ser	Thr	Pro
			165					170						175	

Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

gcgttcaga atctcaccag ccttgtggtg ctgcatttgc ataacaaccg catccagcat  
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ctgggggaccc acagcttcga ggggctgcac aatctggaga cactagacct gaattataac  
120  
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actgggggttc  
180  
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag  
240  
acgatacact tttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg  
300  
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc  
360  
aaaggcacca ccagcctgga gatcctgacc ctgaccgcg caggcatccg gctgctccca  
420

tcggggatgt gccaacagct gcccaggctc cgagtcctgg aactgtctca caatcaaatt  
 480  
 gaggagctgc ccagcctgca caggtgtcag aaattggagg aaatcggcct ccaacacaac  
 540  
 cgcacatctggg aaattggagc tgacaccttc agccagctga gctccctgca agccctggat  
 600  
 ttaaggtgga acgccatccg gtccatccac cccgaggcct tctccaccct gcactccctg  
 660  
 gtcaagctgg acctgacaga caaccagctg accacactgc ccctggctgg acttggggggc  
 720  
 ttgatgcac tgaagctcaa agggaaacctt gctctctccc aggccttctc caaggacagt  
 780  
 ttcccaaaaac tgaggatc  
 798

&lt;210&gt; 2694

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2694

Ala Phe Gln Asn Leu Thr Ser Leu Val Val Leu His Leu His Asn Asn  
 1 5 10 15  
 Arg Ile Gln His Leu Gly Thr His Ser Phe Glu Gly Leu His Asn Leu  
 20 25 30  
 Glu Thr Leu Asp Leu Asn Tyr Asn Lys Leu Gln Glu Phe Pro Val Ala  
 35 40 45  
 Ile Arg Thr Leu Gly Arg Leu Gln Glu Leu Gly Phe His Asn Asn Asn  
 50 55 60  
 Ile Lys Ala Ile Pro Glu Lys Ala Phe Met Gly Asn Pro Leu Leu Gln  
 65 70 75 80  
 Thr Ile His Phe Tyr Asp Asn Pro Ile Gln Phe Val Gly Arg Ser Ala  
 85 90 95  
 Phe Gln Tyr Leu Pro Lys Leu His Thr Leu Ser Leu Asn Gly Ala Met  
 100 105 110  
 Asp Ile Gln Glu Phe Pro Asp Leu Lys Gly Thr Thr Ser Leu Glu Ile  
 115 120 125  
 Leu Thr Leu Thr Arg Ala Gly Ile Arg Leu Leu Pro Ser Gly Met Cys  
 130 135 140  
 Gln Gln Leu Pro Arg Leu Arg Val Leu Glu Leu Ser His Asn Gln Ile  
 145 150 155 160  
 Glu Glu Leu Pro Ser Leu His Arg Cys Gln Lys Leu Glu Glu Ile Gly  
 165 170 175  
 Leu Gln His Asn Arg Ile Trp Glu Ile Gly Ala Asp Thr Phe Ser Gln  
 180 185 190  
 Leu Ser Ser Leu Gln Ala Leu Asp Leu Arg Trp Asn Ala Ile Arg Ser  
 195 200 205  
 Ile His Pro Glu Ala Phe Ser Thr Leu His Ser Leu Val Lys Leu Asp  
 210 215 220  
 Leu Thr Asp Asn Gln Leu Thr Thr Leu Pro Leu Ala Gly Leu Gly Gly  
 225 230 235 240  
 Leu Met His Leu Lys Leu Lys Gly Asn Leu Ala Leu Ser Gln Ala Phe  
 245 250 255  
 Ser Lys Asp Ser Phe Pro Lys Leu Arg Ile

260

265

&lt;210&gt; 2695

&lt;211&gt; 2265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; .2695

nagccagagg gacgagctag cccgacgatg gcccagggga cattgatccg tgtgaccca  
60  
gagcagccca cccatgccgt gtgtgtgctg ggcaccttga ctcagcttga catctgcagc  
120  
tctgcccctg aggactgcac gtccttcagc atcaacgcct ccccaggggt ggtcgtggat  
180  
attgcccaca gccctccagc caagaagaaa tccacaggtt cctccacatg gcccctggac  
240  
cctggggtag aggtgaccct gacgatgaaa gcggccagtg gtagcacagg cgaccagaag  
300  
gttcagattt catactacgg acccaagact ccaccagtca aagctctact ctacctcacc  
360  
gcggtggaag tctccctgtg cgcagacatc acccgcaccg gcaaagtga gccaaccaga  
420  
gctgtgaaag atcagaggac ctggacctgg ggcccttgtg gacaggggtg catcctgctg  
480  
gtgaactgtg acagagacaa tctcgaatct tctgccatgg actgcgagga tgatgaagtg  
540  
cttgacagcg aagacctgca ggacatgtcg ctgatgaccc tgagcacgaa gacccccaag  
600  
gacttcttca caaaccatac actggtgctc cacgtggcca ggtctgagat ggacaaagtg  
660  
agggtgtttc aggccacacg gggcaaaactg tctccaagt gcagcgtagt cttgggtccc  
720  
aagtggccct ctactacct gatgggtccc ggtggaaagc acaacatgga cttctacgtg  
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840  
ctggacacgt ccaacctgga gctccccgag gctgtggtgt tccaagacag cgtggtcttc  
900  
cgctggcgc cctggatcat gaccccaac acccagcccc cgcaggaggt gtacgcgtgc  
960  
agtatttttg aaaatgagga cttcctgaag tcagtgacta ctctggccat gaaagccaag  
1020  
tgcaagctga ccatctgccc tgaggaggag aacatggatg accagtggat gcaggatgaa  
1080  
atggagatcg gctacatcca agccccacac aaaacgctgc ccgtggtctt cgactctcca  
1140  
aggaacagag gcctgaagga gtttcccatc aaacgagtga tgggtccaga ttttggtat  
1200  
gtaactcgag ggcccaaac agggggtatc agtggactgg actcctttgg gaacctggaa  
1260  
gtgagcccc cagtcacagt caggggcaag gaataccgc tgggcaggat tctcttcggg  
1320  
gacagctgtt atcccagcaa tgacagccgg cagatgcacc aggccctgca ggacttcctc  
1380

agtgcccagc aggtgcaggc ccctgtgaag ctctattctg actggctgtc cgtgggccac  
 1440  
 gtggacgagt tcctgagctt tgtgccagca cccgacagga agggcttccg gctgctcctg  
 1500  
 gccagcccca ggtcctgcta caaactgttc caggagcagc agaatgaggg ccacggggag  
 1560  
 gccctgctgt tcgaagggat caagaaaaaa aaacagcaga aaataaagaa cattctgtca  
 1620  
 aacaagacat tgagagaaca taattcattt gtggagagat gcatcgactg gaaccgagag  
 1680  
 ctgctgaagc gggagctggg cctggccgag agtgacatca ttgacatccc gcagctcttc  
 1740  
 aagctcaaag agttctctaa ggcggaagct tttttcccca acatggtgaa catgctggg  
 1800  
 ctagggaagc acctgggcat cccaagccc ttcggggccc tcataacgg ccgctgctgc  
 1860  
 ctggaggaga aggtgtgttc cctgctggag ccaactgggcc tccagtgcac cttcatcaac  
 1920  
 gacttcttca cctaccacat caggcatggg gaggtgcact gcggcaccaa cgtgcgcaga  
 1980  
 aagcccttct cttcaagtg gtggaacatg gtgccctgag cccatcttcc ctggcgctct  
 2040  
 ctccctcctg gccagatgtc gctgggtcct ctgcagtgtg gcaagcaaga gctcttgtga  
 2100  
 atattgtggc tccttggggg cggccagccc tcccagcagt ggcttgcttt cttctcctg  
 2160  
 gatgtcccag tttccctc tgaagatccc aacatgggtcc tagcactgca cactcagttc  
 2220  
 tgctctaaga agctgcaata aagttttttt aagtcacttt gtaca  
 2265

&lt;210&gt; 2696

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2696

Met	Ala	Gln	Gly	Thr	Leu	Ile	Arg	Val	Thr	Pro	Glu	Gln	Pro	Thr	His
1				5					10					15	
Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
			35				40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
			50			55					60				
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
					70				75					80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
				85				90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100					105					110		
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
			115				120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130					135					140					
Gly 145	Gln	Gly	Ala	Ile	Leu 150	Leu	Val	Asn	Cys	Asp 155	Arg	Asp	Asn	Leu 160	Glu
Ser	Ser	Ala	Met	Asp 165	Cys	Glu	Asp	Asp	Glu	Val 170	Leu	Asp	Ser	Glu 175	Asp
Leu	Gln	Asp	Met	Ser	Leu	Met	Thr	Leu	Ser	Thr	Lys	Thr	Pro	Lys	Asp
Phe	Phe	Thr	Asn	His	Thr	Leu	Val	Leu	His	Val	Ala	Arg	Ser	Glu	Met
Asp	Lys	Val	Arg	Val	Phe	Gln	Ala	Thr	Arg	Gly	Lys	Leu	Ser	Ser	Lys
Cys 225	Ser	Val	Val	Leu	Gly 230	Pro	Lys	Trp	Pro	Ser	His	Tyr	Leu	Met	Val
Pro	Gly	Gly	Lys	His	Asn	Met	Asp	Phe	Tyr	Val	Glu	Ala	Leu	Ala	Phe
Pro	Asp	Thr	Asp	Phe	Pro	Gly	Leu	Ile	Thr	Leu	Thr	Ile	Ser	Leu	Leu
Asp	Thr	Ser	Asn	Leu	Glu	Leu	Pro	Glu	Ala	Val	Val	Phe	Gln	Asp	Ser
Val	Val	Phe	Arg	Val	Ala	Pro	Trp	Ile	Met	Thr	Pro	Asn	Thr	Gln	Pro
Pro 305	Gln	Glu	Val	Tyr	Ala	Cys	Ser	Ile	Phe	Glu	Asn	Glu	Asp	Phe	Leu
Lys	Ser	Val	Thr	Thr	Leu	Ala	Met	Lys	Ala	Lys	Cys	Lys	Leu	Thr	Ile
Cys	Pro	Glu	Glu	Glu	Asn	Met	Asp	Asp	Gln	Trp	Met	Gln	Asp	Glu	Met
Glu	Ile	Gly	Tyr	Ile	Gln	Ala	Pro	His	Lys	Thr	Leu	Pro	Val	Val	Phe
Asp	Ser	Pro	Arg	Asn	Arg	Gly	Leu	Lys	Glu	Phe	Pro	Ile	Lys	Arg	Val
Met 385	Gly	Pro	Asp	Phe	Gly	Tyr	Val	Thr	Arg	Gly	Pro	Gln	Thr	Gly	Gly
Ile	Ser	Gly	Leu	Asp	Ser	Phe	Gly	Asn	Leu	Glu	Val	Ser	Pro	Pro	Val
Thr	Val	Arg	Gly	Lys	Glu	Tyr	Pro	Leu	Gly	Arg	Ile	Leu	Phe	Gly	Asp
Ser	Cys	Tyr	Pro	Ser	Asn	Asp	Ser	Arg	Gln	Met	His	Gln	Ala	Leu	Gln
Asp	Phe	Leu	Ser	Ala	Gln	Gln	Val	Gln	Ala	Pro	Val	Lys	Leu	Tyr	Ser
Asp 465	Trp	Leu	Ser	Val	Gly	His	Val	Asp	Glu	Phe	Leu	Ser	Phe	Val	Pro
Ala	Pro	Asp	Arg	Lys	Gly	Phe	Arg	Leu	Leu	Leu	Ala	Ser	Pro	Arg	Ser
Cys	Tyr	Lys	Leu	Phe	Gln	Glu	Gln	Gln	Asn	Glu	Gly	His	Gly	Glu	Ala
Leu	Leu	Phe	Glu	Gly	Ile	Lys	Lys	Lys	Lys	Gln	Gln	Lys	Ile	Lys	Asn
Ile	Leu	Ser	Asn	Lys	Thr	Leu	Arg	Glu	His	Asn	Ser	Phe	Val	Glu	Arg
Cys 545	Ile	Asp	Trp	Asn	Arg	Glu	Leu	Leu	Lys	Arg	Glu	Leu	Gly	Leu	Ala
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<400> 2697
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120
gtaactgacc ccaggaacat tctgttaacc aacgaacaac tcgagagtgc gagaaaaata
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240
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720
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1020

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tgggttctcc cagttacgga aaccttttaa agatccacat tagcctttta gaataaagct  
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2340  
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&lt;210&gt; 2698

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2698

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 1 5 10 15  
 Pro Asn Ile Asn Ile Lys Glu Pro Arg Trp Asp Gln Ser Thr Phe Ile  
 20 25 30  
 Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu  
 35 40 45  
 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr  
 50 55 60  
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg  
 65 70 75 80  
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys  
 85 90 95  
 Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr  
 100 105 110  
 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu  
 115 120 125  
 Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr  
 130 135 140  
 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala  
 145 150 155 160  
 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn  
 165 170 175  
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe  
 180 185 190  
 Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln  
 195 200 205  
 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg  
 210 215 220  
 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val  
 225 230 235 240  
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe  
 245 250 255  
 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp  
 260 265 270  
 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe  
 275 280 285  
 Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser  
 290 295 300  
 Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His  
 305 310 315 320  
 Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu  
 325 330

&lt;210&gt; 2699

&lt;211&gt; 974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2699

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 180  
 gcgatgccgc ttcccgacac catgttctgc gctcagcaga tccacattcc cccggagctg  
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 ccggacatcc tgaagcaatt caccaaggct gccatccgca cccagccggc cgacgtgctg  
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 cgggtggtcgg cagggatatt ttcagctctg tcgagaggag atccacttcc tgtaaaggac  
 360  
 agaatggaaa tgctgtggc aaccagaaa acagacacag gcctgactca aggactcctg  
 420  
 aaagttttgc acaagcagtg tcaccacaag cggatatgtg aattaacaga tcttgagcag  
 480  
 aagtgggaaga acttgtgcct gccgaaggaa aaattcaaag cgctcttaca actggatcct  
 540  
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 660  
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 720  
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 780  
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 840  
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<210> 2700

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

Met	Pro	Leu	Pro	Asp	Thr	Met	Phe	Cys	Ala	Gln	Gln	Ile	His	Ile	Pro
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Pro	Glu	Leu	Pro	Asp	Ile	Leu	Lys	Gln	Phe	Thr	Lys	Ala	Ala	Ile	Arg
			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
			35				40					45			
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
			50				55				60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70					75					80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100					105				110			
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

115 120 125  
 Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala  
 130 135 140  
 Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro  
 145 150 155 160  
 Leu Ala Ser Pro Ser Arg Arg Phe Pro Thr Phe Thr Ala Thr Trp Pro  
 165 170 175  
 Asp

<210> 2701  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

<400> 2701  
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 120  
 agcacactga gaggatgatt taagaaaaac tggctgggca cgggtgtcca tgcctgtaat  
 180  
 cccagcactt tgggaggcca aaatgccagc agctcttcct tgccagagat gatctgaccc  
 240  
 ggtgggggca gctggaaagc aacactggcc cccagctgaa gggcccagct gcagccagac  
 300  
 agatgggtgct tgagaaccga ggcccgtga tcctccagcc acagtccagc ccaaccactg  
 360  
 ccactttcca tgggacttag aacttcggag ttgctgcctt gcaattggag gaaggacctg  
 420  
 gggcccgag accaggagag ccgctggaag cagtacctgg aggacgagag gatcgcgctt  
 480  
 ttctgcaga acgaggagtt catgaaggaa ctgcaacgga accgagactt cctcctcgct  
 540  
 ctggagagag atcgattgaa atacgaatcc cagaaatcta aatccagcag cgtggctgtc  
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 ggaaaacgact ttggcttttc ctctcctgtc ccaggaactg gcgacg  
 646

<210> 2702  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 2702  
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 Leu Gly Pro Gly Asp Gln Glu Ser Arg Trp Lys Gln Tyr Leu Glu Asp  
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 Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu  
 35 40 45  
 Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys  
 50 55 60  
 Tyr Glu Ser Gln Lys Ser Lys Ser Ser Val Ala Val Gly Asn Asp

65                      70                      75  
Phe Gly Phe Ser Ser Pro Val Pro Gly Thr Gly Asp  
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<210> 2703
<211> 610
<212> DNA
<213> Homo sapiens
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<400> 2703
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120
ataaaatgca aaccaccctt ctgtagcaac tcacccatct gcatcgcccg tgaatgttcg
180
ggcccttggg gaaaagggct cttgccccca gaaggaaact tgctcccaag gcctttgctg
240
ggggaggggc ccaaagggga ggccccaag ttccctcttt tctttgatct ttctcttgtc
300
catcttcctc aagcccaccc tgcagcgtcc taggcaaggc cctgccagag atgctagctc
360
agggtccttg gatctcactc aagtggatcc tcagactcat ctggcaggtc tccaaatact
420
acatttcctc tggtctccag gattccactt cttggaaact tgggtgtcggc agctcccccc
480
atcccttttc tgccctagga acgtgaggct ttaaggaaag ggaagattgg aggacttact
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cttcacgcgt
610

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<210> 2704
<211> 108
<212> PRT
<213> Homo sapiens
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<400> 2704
Met Gly Lys Ser Ile Pro Gln Tyr Leu Gly Gln Leu Asp Ile Arg Lys
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Ser Val Val Ser Leu Ala Thr Gly Ala Gly Ala Ile Tyr Leu Leu Tyr
      20                25                30
Lys Ala Ile Lys Ala Gly Ile Lys Cys Lys Pro Pro Leu Cys Ser Asn
      35                40                45
Ser Pro Ile Cys Ile Ala Arg Glu Cys Ser Gly Pro Trp Gly Lys Gly
      50                55                60
Leu Leu Pro Pro Glu Gly Thr Leu Leu Pro Arg Pro Leu Leu Gly Glu
65                70                75                80
Gly Pro Lys Gly Glu Ala Ser Lys Phe Pro Leu Phe Phe Asp Leu Ser
      85                90                95
Leu Val His Leu Pro Gln Ala His Pro Ala Ala Ser
      100                105

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<210> 2705  
 <211> 843  
 <212> DNA  
 <213> Homo sapiens

<400> 2705  
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 gacatcaaca tccaggaacc tcgctgggac caaagtactt tcctgggcag agcccggcac  
 180  
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 420  
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 660  
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 720  
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 840  
 atg  
 843

<210> 2706  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 2706  
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 Thr Val Thr Asp Pro Arg Asn Leu Leu Leu Ser Gly Ala Gln Leu Glu  
 35 40 45  
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro  
 50 55 60  
 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser  
 65 70 75 80  
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

										85							90							95		
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr											
										100							105							110		
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln											
										115							120							125		
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro											
										130							135							140		
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly											
										145							150							155		
Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro											
										165							170							175		
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn											
										180							185							190		
Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile											
										195							200							205		
Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala											
										210							215							220		
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala											
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<210> 2707

<211> 2921

<212> DNA

<213> Homo sapiens

<400> 2707

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180	ccaccccccg	gcggcggcac	gatgcccttt	gacttcagga	ggtttgacat	ctacaggaag
240	gtgcccaagg	accttacgca	gccaacgtac	accggggcca	ttatctccat	ctgctgctgc
300	ctcttcaccc	tcttcctctt	cctctcggag	ctcacccgat	ttataacgac	agaagttgtg
360	aacgagctct	atgtcgatga	cccagacaag	gacagcggtg	gcaagatcga	cgtcagtctg
420	aacatcagtt	tacccaatct	gcactgcgag	ttggttgggc	ttgacattca	ggatgagatg
480	ggcaggcaag	aagtggggcca	catcgacaac	tccatgaaga	tcccgcgtgaa	caatgggggca
540	ggctgccgct	tcgaggggca	gttcagcatc	aacaaggctc	ccggcaactt	ccacgtgtcc
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6536

&lt;210&gt; 2712

&lt;211&gt; 2096

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2712

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Met Ala Glu Val Thr Val Pro Arg Val Tyr Val Val Phe Gly Ile His
 1           5           10           15
Cys Ile Met Ala Lys Ala Ser Ser Asp Val Gln Val Ser Gly Phe His
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Arg Lys Ile Gln His Val Lys Asn Glu Leu Cys His Met Leu Ser Leu
 35           40           45
Glu Glu Val Ala Pro Val Leu Gln Gln Thr Leu Leu Gln Asp Asn Leu
 50           55           60
Leu Gly Arg Val His Phe Asp Gln Phe Lys Glu Ala Leu Ile Leu Ile
65           70           75           80
Leu Ser Arg Thr Leu Ser Asp Glu Glu His Phe Gln Glu Pro Asp Cys
 85           90           95
Ser Leu Glu Ala Gln Pro Arg Tyr Val Arg Gly Glu Lys Pro Tyr Gly
100           105           110
Arg Arg Ser Leu Pro Glu Phe Gln Glu Ser Val Glu Glu Phe Pro Glu
115           120           125
Val Thr Val Ile Glu Pro Leu Asp Glu Glu Ala Arg Pro Ser His Ile
130           135           140
Pro Ala Gly Asp Cys Ser Glu His Trp Lys Thr Gln Arg Ser Glu Glu
145           150           155           160
Tyr Glu Ala Glu Gly Gln Leu Arg Phe Trp Asn Pro Asp Asp Leu Asn
165           170           175
Ala Ser Gln Ser Gly Ser Ser Pro Pro Gln Asp Trp Ile Glu Glu Lys
180           185           190
Leu Gln Gln Val Cys Glu Asp Leu Gly Ile Thr Pro Asp Gly His Leu
195           200           205
Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
210           215           220
Val Asp Gly Glu Met Leu Glu Glu Val Phe His Asn Leu Asp Pro Asp
225           230           235           240
Gly Thr Met Ser Val Glu Asp Phe Phe Tyr Gly Leu Phe Lys Asn Gly
245           250           255
Lys Ser Leu Thr Pro Ser Ala Ser Thr Pro Tyr Arg Gln Leu Lys Arg
260           265           270
His Leu Ser Met Gln Ser Phe Asp Glu Ser Gly Arg Arg Thr Thr Thr
275           280           285
Ser Ser Ala Thr Thr Ser Thr Ile Gly Phe Arg Val Phe Ser Cys Leu
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Asp Asp Gly Met Gly His Ala Ser Val Glu Arg Ile Leu Asp Thr Trp
305           310           315           320
Gln Glu Glu Gly Ile Glu Asn Ser Gln Glu Ile Leu Lys Ala Leu Asp
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Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
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Glu Asn Glu Leu Leu Val Thr Lys Asn Ser Ile His Gln Ala Ala Leu
355           360           365
Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
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Val Val Arg Glu Lys Arg Ser Tyr Gly Arg Ile Trp Thr Ala Glu Lys
385           390           395           400
Leu Lys Ser Leu Met Ala Ser Glu Val Asp Asp His Asp Ala Ala Ile

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Glu	Arg	Ile	Ala	Ala	Leu	Lys	Asn	Glu	Leu	Arg	Lys	Glu	Arg	Glu	Gln			
										435			440			445		
Ile	Leu	Gln	Gln	Ala	Gly	Lys	Gln	Arg	Leu	Glu	Leu	Glu	Gln	Glu	Ile			
										450			455			460		
Glu	Lys	Ala	Lys	Thr	Glu	Glu	Asn	Tyr	Ile	Arg	Asp	Arg	Leu	Ala	Leu			
										465			470			475		
Ser	Leu	Lys	Glu	Asn	Ser	Arg	Leu	Glu	Asn	Glu	Leu	Leu	Glu	Asn	Ala			
										485			490			495		
Glu	Lys	Leu	Ala	Glu	Tyr	Glu	Asn	Leu	Thr	Asn	Lys	Leu	Gln	Arg	Asn			
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Leu	Glu	Asn	Val	Leu	Ala	Glu	Lys	Phe	Gly	Asp	Leu	Asp	Pro	Ser	Ser			
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Ala	Glu	Phe	Phe	Leu	Gln	Glu	Glu	Arg	Leu	Thr	Gln	Met	Arg	Asn	Glu			
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Tyr	Glu	Arg	Gln	Cys	Arg	Val	Leu	Gln	Asp	Gln	Val	Asp	Glu	Leu	Gln			
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Ser	Glu	Leu	Glu	Glu	Tyr	Arg	Ala	Gln	Gly	Arg	Val	Leu	Arg	Leu	Pro			
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Leu	Lys	Asn	Ser	Pro	Ser	Glu	Glu	Val	Glu	Ala	Asn	Ser	Gly	Gly	Ile			
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Glu	Pro	Glu	His	Gly	Leu	Gly	Ser	Glu	Glu	Cys	Asn	Pro	Leu	Asn	Met			
										595			600			605		
Ser	Ile	Glu	Ala	Glu	Leu	Val	Ile	Glu	Gln	Met	Lys	Glu	Gln	His	His			
										610			615			620		
Arg	Asp	Ile	Cys	Cys	Leu	Arg	Leu	Glu	Leu	Glu	Asp	Lys	Val	Arg	His			
										625			630			635		
Tyr	Glu	Lys	Gln	Leu	Asp	Glu	Thr	Val	Val	Ser	Cys	Lys	Lys	Ala	Gln			
										645			650			655		
Glu	Asn	Met	Lys	Gln	Arg	His	Glu	Asn	Glu	Thr	His	Thr	Leu	Glu	Glu			
										660			665			670		
Gln	Ile	Ser	Asp	Leu	Lys	Met	Lys	Ile	Ala	Glu	Leu	Gln	Gly	Gln	Ala			
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Ala	Val	Leu	Lys	Glu	Ala	His	His	Glu	Ala	Thr	Cys	Arg	His	Glu	Glu			
										690			695			700		
Glu	Lys	Lys	Gln	Leu	Gln	Val	Lys	Leu	Glu	Glu	Lys	Thr	His	Leu				
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Gln	Glu	Lys	Leu	Arg	Leu	Gln	His	Glu	Met	Glu	Leu	Lys	Ala	Arg	Leu			
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Thr	Gln	Ala	Gln	Ala	Ser	Phe	Gly	Arg	Glu	Arg	Glu	Gly	Leu	Gln	Ser			
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Ser	Ala	Trp	Thr	Glu	Glu	Lys	Val	Arg	Gly	Leu	Thr	Gln	Glu	Leu	Glu			
										755			760			765		
Gln	Phe	His	Gln	Glu	Gln	Leu	Thr	Ser	Leu	Val	Glu	Lys	His	Thr	Leu			
										770			775			780		
Glu	Lys	Glu	Glu	Leu	Arg	Lys	Glu	Leu	Leu	Glu	Lys	His	Gln	Arg	Glu			
										785			790			795		
Leu	Gln	Glu	Gly	Arg	Glu	Lys	Met	Glu	Thr	Glu	Cys	Asn	Arg	Arg	Thr			
										805			810			815		
Ser	Gln	Ile	Glu	Ala	Gln	Phe	Gln	Ser	Asp	Cys	Gln	Lys	Val	Thr	Glu			
										820			825			830		
Arg	Cys	Glu	Ser	Ala	Leu	Gln	Ser	Leu	Glu	Gly	Arg	Tyr	Arg	Gln	Glu			

835 840 845  
 Leu Lys Asp Leu Gln Glu Gln Gln Arg Glu Glu Lys Ser Gln Trp Glu  
 850 855 860  
 Phe Glu Lys Asp Glu Leu Thr Gln Glu Cys Ala Glu Ala Gln Glu Leu  
 870 875 880  
 Leu Lys Glu Thr Leu Lys Arg Glu Lys Thr Thr Ser Leu Val Leu Thr  
 885 890 895  
 Gln Glu Arg Glu Met Leu Glu Lys Thr Tyr Lys Asp His Leu Asn Ser  
 900 905 910  
 Met Val Val Glu Arg Gln Gln Leu Leu Gln Asp Leu Glu Asp Leu Arg  
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 Asn Val Ser Glu Thr Gln Gln Ser Leu Leu Ser Asp Gln Ile Leu Glu  
 930 935 940  
 Leu Lys Ser Ser His Lys Arg Glu Leu Arg Glu Arg Glu Glu Val Leu  
 945 950 955 960  
 Cys Gln Gln Gly Val Ser Glu Gln Leu Ala Ser Gln Arg Leu Glu Arg  
 965 970 975  
 Leu Glu Met Glu His Asp Gln Glu Arg Gln Glu Met Met Ser Lys Leu  
 980 985 990  
 Leu Ala Met Glu Asn Ile His Lys Ala Thr Cys Glu Thr Ala Asp Arg  
 995 1000 1005  
 Glu Arg Ala Glu Met Ser Thr Glu Ile Ser Arg Leu Gln Ser Lys Ile  
 1010 1015 1020  
 Lys Glu Met Gln Gln Ala Thr Ser Pro Leu Ser Met Leu Gln Ser Gly  
 1025 1030 1035 1040  
 Cys Gln Val Ile Gly Glu Glu Val Glu Gly Asp Gly Ala Leu Ser  
 1045 1050 1055  
 Leu Leu Gln Lys Gly Glu Gln Leu Leu Glu Glu Asn Gly Asp Val Leu  
 1060 1065 1070  
 Leu Ser Leu Gln Arg Ala His Glu Gln Ala Val Lys Glu Asn Val Lys  
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 Met Ala Thr Glu Ile Ser Arg Leu Gln Gln Arg Leu Gln Lys Leu Glu  
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 1125 1130 1135  
 Thr Lys Gln Val Glu Gly Val Thr Arg Arg His Val Leu Ser Asp Leu  
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 1155 1160 1165  
 Gln Arg Gln Glu Val Lys Ile Glu Glu Ser Glu Ala Ser Val Glu Gly  
 1170 1175 1180  
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 Leu Lys Asn His Ile Ser Leu Leu Gln Glu Gln Leu Met Met Phe Cys  
 1205 1210 1215  
 Ala Asp Cys Asp Leu Ala Ser Glu Lys Lys Gln Glu Leu Leu Phe Asp  
 1220 1225 1230  
 Val Ser Val Leu Lys Lys Lys Leu Lys Ile Leu Glu Arg Ile Pro Glu  
 1235 1240 1245  
 Ala Ser Pro Arg Tyr Lys Leu Leu Tyr Glu Asp Val Ser Arg Glu Asn  
 1250 1255 1260  
 Asp Cys Leu Gln Glu Glu Leu Glu Met Met Glu Thr Arg Tyr Asp Glu

1265                      1270                      1275                      1280  
 Ala Leu Glu Asn Asn Lys Glu Leu Thr Ala Glu Val Phe Arg Leu Gln  
                                  1285                      1290                      1295  
 Asp Glu Leu Lys Lys Met Glu Glu Val Thr Glu Thr Phe Leu Ser Leu  
                                  1300                      1305                      1310  
 Glu Lys Ser Tyr Asp Glu Val Lys Ile Glu Asn Glu Glu Leu Asn Val  
                                  1315                      1320                      1325  
 Leu Val Leu Arg Leu Gln Gly Lys Ile Glu Lys Leu Xaa Thr Arg Ala  
                                  1330                      1335                      1340  
 Trp Ser Ser Gly Val Thr Ala Ala Tyr Gly Lys Xaa Ser Leu Glu Asn  
 1345                      1350                      1355                      1360  
 Leu Glu Ile Glu Pro Asp Gly Asn Ile Leu Gln Leu Asn Gln Thr Leu  
                                  1365                      1370                      1375  
 Glu Glu Cys Val Pro Arg Val Arg Ser Val His His Val Ile Glu Glu  
                                  1380                      1385                      1390  
 Cys Lys Gln Glu Asn Gln Tyr Leu Glu Gly Asn Thr Gln Leu Leu Glu  
                                  1395                      1400                      1405  
 Lys Val Lys Ala His Glu Ile Ala Trp Leu His Gly Thr Ile Gln Thr  
                                  1410                      1415                      1420  
 His Gln Glu Arg Pro Arg Val Gln Asn Gln Val Ile Leu Glu Glu Asn  
 1425                      1430                      1435                      1440  
 Thr Thr Leu Leu Gly Phe Gln Asp Lys His Phe Gln His Gln Ala Thr  
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 Ile Ala Glu Leu Glu Leu Glu Lys Thr Lys Leu Gln Glu Leu Thr Arg  
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 Lys Leu Lys Glu Arg Val Pro Ile Leu Val Lys Gln Lys Asp Val Leu  
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 Ser Pro Gly Lys Lys Glu Glu Glu Leu Lys Ala Met Met His Asp Leu  
                                  1490                      1495                      1500  
 Gln Ile Pro Cys Ser Glu Met Gln Gln Lys Val Glu Leu Leu Lys Tyr  
 1505                      1510                      1515                      1520  
 Glu Ser Glu Lys Leu Gln Gln Glu Asn Ser Ile Leu Arg Asn Glu Ile  
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                                  1570                      1575                      1580  
 Ile Ser Glu Leu Lys Ile Lys Asn Gln Gln Leu Asp Leu Glu Asn Thr  
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 Glu Pro Glu Arg Cys Lys Val Gln Ser Ser Thr Leu Val Ser Ser Leu  
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 1665                      1670                      1675                      1680  
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 Arg Cys Pro Asp Leu Ser Asn Phe Gln Gln Lys Ile Ser Ser Val Leu

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 1715 1720 1725  
 Leu Asn Ser Cys Val Asp Lys Leu Ala Lys Ser Ser Leu Leu Glu His  
 1730 1735 1740  
 Arg Ile Ala Thr Met Lys Gln Glu Gln Lys Ser Trp Glu His Gln Ser  
 1745 1750 1755 1760  
 Ala Ser Leu Lys Thr Gln Leu Val Ala Ser Gln Glu Lys Val Gln Asn  
 1765 1770 1775  
 Leu Glu Asp Thr Val Gln Asn Val Asn Leu Gln Met Ser Arg Met Lys  
 1780 1785 1790  
 Ser Asp Pro Arg Val Thr Gln Gln Glu Lys Glu Ala Leu Lys Gln Glu  
 1795 1800 1805  
 Val Met Pro Leu His Lys Gln Leu Gln Asn Ser Val Xaa Lys Ser Trp  
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 Ala Pro Glu Ile Ala Thr His Pro Ser Gly Leu His Asn Gln Gln Lys  
 1825 1830 1835 1840  
 Arg Leu Ser Trp Asp Lys Leu Asp His Leu Met Asn Glu Glu Gln Gln  
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 1860 1865 1870  
 Lys Ala Glu Leu Thr His Ser Arg Glu Lys Val Arg Gln Leu Glu Ser  
 1875 1880 1885  
 Asn Leu Leu Pro Lys His Gln Lys His Leu Asn Pro Ser Gly Thr Met  
 1890 1895 1900  
 Asn Pro Thr Glu Gln Glu Lys Leu Ser Leu Lys Arg Glu Cys Asp Gln  
 1905 1910 1915 1920  
 Phe Gln Lys Glu Gln Ser Pro Ala Asn Arg Lys Val Ser Gln Met Asn  
 1925 1930 1935  
 Ser Leu Glu Gln Glu Leu Glu Thr Ile His Leu Glu Asn Glu Gly Leu  
 1940 1945 1950  
 Lys Lys Lys Gln Val Lys Leu Asp Glu Gln Leu Met Glu Met Gln His  
 1955 1960 1965  
 Leu Arg Ser Thr Ala Thr Pro Ser Pro Ser Pro His Ala Trp Asp Leu  
 1970 1975 1980  
 Gln Leu Leu Gln Gln Gln Ala Cys Pro Met Val Pro Arg Glu Gln Phe  
 1985 1990 1995 2000  
 Leu Gln Leu Gln Arg Gln Leu Leu Gln Ala Glu Arg Ile Asn Gln His  
 2005 2010 2015  
 Leu Gln Glu Glu Leu Glu Asn Arg Thr Ser Glu Thr Asn Thr Pro Gln  
 2020 2025 2030  
 Gly Asn Gln Glu Gln Leu Val Thr Val Met Glu Glu Arg Met Ile Glu  
 2035 2040 2045  
 Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Leu Gln Glu Lys Val  
 2050 2055 2060  
 Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro  
 2065 2070 2075 2080  
 Thr Ser His Ser Ser Phe Asn Ser Ser Phe Thr Ser Leu Tyr Cys His  
 2085 2090 2095

&lt;210&gt; 2713

&lt;211&gt; 2066

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2713

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 aaaaaaaaaa aaaaaaaaaa aaaaaa  
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<210> 2714

<211> 214

<212> PRT

<213> Homo sapiens

<400> 2714

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Cys	Ala	Glu	Leu	Gln	Gln	Pro	Ala	Leu	Ala	Gly	Ala	Asp	Trp	Gln	Leu
			20					25					30		
Leu	Val	Glu	Thr	Ser	Gly	Ile	Ser	Ile	Tyr	Arg	Leu	Leu	Asp	Lys	Lys
			35				40					45			
Thr	Gly	Leu	Tyr	Glu	Tyr	Lys	Val	Phe	Gly	Val	Leu	Glu	Asp	Cys	Ser
	50					55					60				
Pro	Thr	Leu	Leu	Ala	Asp	Ile	Tyr	Met	Asp	Ser	Asp	Tyr	Arg	Lys	Gln
65				70					75					80	
Trp	Asp	Gln	Tyr	Val	Lys	Glu	Leu	Tyr	Glu	Gln	Glu	Cys	Asn	Gly	Glu
			85					90					95		
Thr	Val	Val	Tyr	Trp	Glu	Val	Lys	Tyr	Pro	Phe	Pro	Met	Ser	Asn	Arg
			100					105					110		
Asp	Tyr	Val	Tyr	Leu	Arg	Gln	Arg	Arg	Asp	Leu	Asp	Met	Glu	Gly	Arg
		115				120						125			
Lys	Ile	His	Val	Ile	Leu	Ala	Arg	Ser	Thr	Ser	Met	Pro	Gln	Leu	Gly
	130				135					140					
Glu	Arg	Ser	Gly	Val	Ile	Arg	Val	Lys	Gln	Tyr	Lys	Gln	Ser	Leu	Ala
145				150					155					160	
Ile	Glu	Ser	Asp	Gly	Lys	Lys	Gly	Ser	Lys	Val	Phe	Met	Tyr	Tyr	Phe
			165					170					175		
Asp	Asn	Pro	Gly	Gly	Gln	Ile	Pro	Ser	Trp	Leu	Ile	Asn	Trp	Ala	Ala
		180						185					190		
Lys	Asn	Gly	Val	Pro	Asn	Phe	Leu	Lys	Asp	Met	Ala	Arg	Ala	Cys	Gln
		195					200						205		
Asn	Tyr	Leu	Lys	Lys	Thr										
		210													

&lt;210&gt; 2715

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2715

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 180  
 aatggtgttg gaggcagtcc ccctaagtcc aagttactgt ttagtaacac agcagctcaa  
 240  
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 300  
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 360  
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 378

&lt;210&gt; 2716

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2716

Ile	His	His	Val	Lys	Arg	Gln	Thr	Gly	Ile	Gln	Lys	Glu	Asp	Lys	Tyr
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Lys	Ile	Lys	Gln	Ile	Met	His	His	Phe	Ile	Pro	Asp	Leu	Leu	Phe	Ala
			20					25				30			
Gln	Arg	Gly	Asp	Leu	Ser	Asp	Val	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Met
			35				40					45			
Asp	Val	Asp	Glu	Ala	Thr	Gly	Ala	Val	Lys	Lys	His	Asn	Gly	Val	Gly
			50				55				60				
Gly	Ser	Pro	Pro	Lys	Ser	Lys	Leu	Leu	Phe	Ser	Asn	Thr	Ala	Ala	Gln
65				70					75				80		
Lys	Leu	Arg	Gly	Met	Asp	Glu	Val	Tyr	Asn	Leu	Phe	Tyr	Val	Asn	Asn
			85					90				95			
Asn	Trp	Tyr	Ile	Phe	Met	Arg	Leu	His	Gln	Ile	Leu	Cys	Leu	Arg	Leu
			100					105				110			
Leu	Arg	Ile	Cys	Ser	Gln	Ala	Glu	Arg	Gln	Ile	Glu	Glu	Glu		
			115				120				125				

&lt;210&gt; 2717

&lt;211&gt; 2076

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2717

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<212> PRT

<213> Homo sapiens

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&lt;210&gt; 2722

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2722

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&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2724

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Gly	Pro	Phe	Val	Arg	Leu	Tyr	Asp	Ile	Arg	Met	Ile	His	Asn	His	Arg
			100					105					110		
Lys	Ser	Met	Lys	Gln	Ser	Pro	Ser	Ala	Gly	Val	His	Thr	Phe	Cys	Asp
		115					120					125			
Arg	Gln	Lys	Pro	Leu	Pro	Asp	Gly	Ala	Ala	Gln	Tyr	Tyr	Val	Ala	Gly
		130				135					140				
His	Leu	Pro	Val	Lys	Leu	Pro	Asp	Tyr	Asn	Asn	Arg	Leu	Arg	Val	Leu
145					150					155					160
Val	Ala	Thr	Tyr	Val	Thr	Phe	Ser	Pro	Asn	Gly	Thr	Glu	Leu	Leu	Val
				165					170					175	
Asn	Met	Gly	Gly	Glu	Gln	Val	Tyr	Leu	Phe	Asp	Leu	Thr	Tyr	Lys	Gln
		180						185					190		
Arg	Pro	Tyr	Thr	Phe	Leu	Leu	Pro	Arg	Lys	Cys	His	Ser	Ser	Gly	Glu
		195					200					205			
Val	Gln	Asn	Gly	Lys	Met	Ser	Thr	Asn	Gly	Val	Ser	Asn	Gly	Val	Ser
		210				215					220				
Asn	Gly	Leu	His	Leu	His	Ser	Asn	Gly	Phe	Arg	Leu	Pro	Glu	Ser	Arg
225					230					235					240
Gly	His	Val	Ser	Pro	Gln	Val	Glu	Leu	Pro	Pro	Tyr	Leu	Glu	Arg	Val
				245					250					255	
Lys	Gln	Gln	Ala	Asn	Glu	Ala	Phe	Ala	Cys	Gln	Gln	Trp	Thr	Gln	Ala
			260					265					270		
Ile	Gln	Leu	Tyr	Ser	Lys	Ala	Val	Gln	Arg	Ala	Pro	His	Asn	Ala	Met
		275					280					285			
Leu	Tyr	Gly	Asn	Arg	Ala	Ala	Ala	Tyr	Met	Lys	Arg	Lys	Trp	Asp	Gly
		290				295					300				
Asp	His	Tyr	Asp	Ala	Leu	Arg	Asp	Cys	Leu	Lys	Ala	Ile	Ser	Leu	Asn
305					310					315					320
Pro	Cys	His	Leu	Lys	Ala	His	Phe	Arg	Leu	Ala	Arg	Cys	Leu	Phe	Glu
				325					330					335	
Leu	Lys	Tyr	Val	Ala	Glu	Ala	Leu	Glu	Cys	Leu	Asp	Asp	Phe	Lys	Gly
			340					345					350		
Lys	Phe	Pro	Glu	Gln	Ala	His	Ser	Ser	Ala	Cys	Asp	Ala	Leu	Gly	Arg
		355					360					365			
Asp	Ile	Thr	Ala	Ala	Leu	Phe	Ser	Lys	Asn	Asp	Gly	Glu	Glu	Lys	Lys
		370				375					380				
Gly	Pro	Gly	Gly	Gly	Ala	Pro	Val	Arg	Leu	Arg	Ser	Thr	Ser	Arg	Lys
385					390					395					400
Gly	Cys	Thr	Arg												

&lt;210&gt; 2725

&lt;211&gt; 856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2725

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60

ctgaccccg gggccctgcc cggccctccc tccagcatca tggccagccc aagaaccagg

120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg  
 180  
 ttcaatcctc agtgggtcag tgtgacctac ggcattctgga tctgcctgga gtgctcgggg  
 240  
 agacaccgcg ggcttgggggt tcacctcagc tttgtgcgct ctgttactat ggacaagtgg  
 300  
 aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagttccg agagttcctg  
 360  
 gagttctcagg aggattacga tccttgctgg tccttgccagg agaagtacaa cagcagagcc  
 420  
 gcggccctct ttagggataa ggtgggtcgct ctggccgaag gcagagagtg gtctctggag  
 480  
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 540  
 cggtagctgc tcctcgtggg gccttagtac agtttccact gggtcctgaa cttagtagat  
 600  
 tgggtttccc acagaattct ccccttcttt gctgttgatga cagctctttt cccagaagtc  
 660  
 agtgggaaaa acagcttttt aaaattgcc aacaatata agcttttagt aaatttggac  
 720  
 acccatagag ctgtctcaga tagcgcccca ggtaagctcc gcacgccttc caggtgtgca  
 780  
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 840  
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 856

&lt;210&gt; 2726

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2726

Met	Ala	Ser	Pro	Arg	Thr	Arg	Lys	Val	Leu	Lys	Glu	Val	Arg	Val	Gln
1			5					10						15	
Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
		20						25					30		
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35				40						45			
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
	50				55					60					
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75					80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85					90						95	
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
	115					120						125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
	130				135						140				
Met	Val	His	Arg												
145															

<210> 2727  
 <211> 1119  
 <212> DNA  
 <213> Homo sapiens

<400> 2727  
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 aaaaaataat caagtacatg gcattaagtt aaatgtctct gcacatgaat ttccacctta  
 120  
 taaatctggg atattaaatt gtgctgtaaa tagatttgta ttttttcttt tttagagtact  
 180  
 atgatagggtg aaatggatatg actataaaaa ggatttggtt ctttttgtct cctggaatga  
 240  
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg  
 300  
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa  
 360  
 gtgggggaaa gtctcagtct cccaggtagg tctcctctca cactgtcctg ggtggcaggc  
 420  
 gctgtttata catgcccgt atcgtctctgg ctgcactgta gatcatctgc cgacgggaca  
 480  
 tcccagtaaa tgccatgtgc caatcagtcg ggctgacatt cagtaaaactc tttccagga  
 540  
 cttcacccac tgtcaccaaa aggcctgacc acctcagatt atagtcctgg ggagttagac  
 600  
 tttgagcctg ctgtacaaat tccaaaggca ctggtgtggc ttgtgtaa atgttctagat  
 660  
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca  
 720  
 gcaattctgc aatgaagttt tctactgaca cagctgtctg tttttcatgg atcaccccag  
 780  
 ttgcagcga gctatctatc cgttcctgag caccttttaa tccagctgca tagcccactg  
 840  
 gttgtggggc aatattggac tgtccagcct cccctacaac cacagctagg ccgaagacct  
 900  
 cctggaaggc atctcggaca gcagccactt tcacttcttt atttgaggtc actacaatat  
 960  
 ccagttcacc tccagatttg atatagggag ccatgccagg gtccagcggt gtaatcatgc  
 1020  
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 1080  
 ccttaataaa accccagatt ccaccagcag atgcttcat  
 1119

<210> 2728  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2728  
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 1 5 10 15  
 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

```

                20                25                30
Glu Leu Asp Ile Val Val Thr Ser Asn Lys Glu Val Lys Val Ala Ala
    35                40                45
Val Arg Asp Ala Phe Gln Glu Val Phe Gly Leu Ala Val Val Val Gly
    50                55                60
Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr Ala Ala
    65                70                75                80
Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly
    85                90                95
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala
    100                105                110
Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu
    115                120                125
Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro
    130                135                140
Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp
    145                150                155                160
Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu
    165                170                175
Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe
    180                185                190
Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg Ala Ile
    195                200                205
Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val
    210                215                220

```

&lt;210&gt; 2729

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2729

```

nnggtggcac ggatcgtagg agccaaatgt ttgttttcct tcttatccct tcgagaccaa
60
atgcagcccc agcagtgggtg aggactact ttcttgaaga gttgtgcatc catgtaggtc
120
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180
agtctctctt cctcttccat actaaggggcc tggcttgacc agtgtgcaga agacttccga
240
gagccccctc acttcccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300
ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
360
gaaactgaca atgggcttcc caacacgatc tcc
393

```

&lt;210&gt; 2730

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2730

```

Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```

```

1           5           10           15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
                20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
                35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
                50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
                85           90

```

&lt;210&gt; 2731

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2731

```

ncgcctccga cctgaaagca cgtccacctc tgcggctcct acctgggtgc aatcgagtta
60
aatggctgat aagcagatca gcctgccagc caagctcatc aatggcggca tcgcgggctg
120
atcgggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctacttcg gcatgtaccg gggagctgct gtgaacttga cctcgtcac ccccgagaag
300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
ctgaccctgc ttaaagagat gctggcgggc tgtggggctg gcacctgcca ggtgatcgtg
420
accacgcccc tggagatgct gaagatc
447

```

&lt;210&gt; 2732

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2732

```

Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
1           5           10           15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
                20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
                35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
                85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

```

		100						105			110
Gln	Val	Ile	Val	Thr	Thr	Pro	Met	Glu	Met	Leu	Lys Ile
		115					120				125

&lt;210&gt; 2733

&lt;211&gt; 3619

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2733

```

gaattctgcc gcaagttccg cgtgagtgcc tggctccttc acccccatgg ggcgagactg
60
tcgggcatgg gtatgggggtg ccagaggggt ctggccacct ggggcttgct gtcctgagag
120
ccccagcacc catgtcacc ccaacagctg gactgcccgc tggccatgga gcggatcaag
180
gaggaccggc ccatcaccat caaggacgac aagggaacc tcaaccgctg catcgagac
240
gtggtctcgc tcttcatcac ggtcatggac aagctgcgcc tggcggagct gacgggtggac
300
gagttcctag cttcgggctt tgactccgag tccgaatccg agtccgaaaa ttctccacaa
360
gcggagacac gggaagcacg cgaggtgcc cggagtccgg ataagccggg cgggagcccc
420
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480
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540
agcgactcgg acagctctga ggaggaagag gggccgttcc actccctgcc agatgtgctg
600
gaggaagcca gtgaggagga ggatggagcg gaggaaggag aagatgggga cagagtcccc
660
agagggctga aggggaagaa gaattctgtt cctgtgaccg tcgccatggt tgagagatgg
720
aagcaggcag caaagcaacg cctcactcca aagctgttcc atgaagtggg acaggcgctc
780
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840
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900
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960
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1080
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1200
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1260
atcacgtatg tgaggaactg caagttcacc tcgcctggtg ccctcccctt catcagtttc
1320

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atgcagtgga ccttgacgga gctgctggcc ctggagccgg gtgtggccta ccagcacgcc  
1380  
ttcctctaca tccgccagct cgccatacac ctgcgcaacg ccatgaccac ccgcaagaag  
1440  
gaaacatacc agtctgtgta caactggcag tatgtgcaact gcctcttcct gtggtgccgg  
1500  
gtcctgagca ctgcggggccc cagcgaagcc ctccagccct tggctacccc ccttgcccaa  
1560  
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1620  
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1680  
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1740  
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 3619

&lt;210&gt; 2734

&lt;211&gt; 790

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2734

Met	Glu	Arg	Ile	Lys	Glu	Asp	Arg	Pro	Ile	Thr	Ile	Lys	Asp	Asp	Lys
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Gly	Asn	Leu	Asn	Arg	Cys	Ile	Ala	Asp	Val	Val	Ser	Leu	Phe	Ile	Thr
	20							25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
	35						40					45			
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
	50					55				60					
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65					70				75					80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
			85					90					95		
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
	100						105					110			
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
	115						120					125			
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
	130					135					140				
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145					150					155				160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
			165					170						175	
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg



180				185				190							
Leu	Thr	Pro	Lys	Leu	Phe	His	Glu	Val	Val	Gln	Ala	Phe	Arg	Ala	Ala
195				200				205							
Val	Ala	Thr	Thr	Arg	Gly	Asp	Gln	Glu	Ser	Ala	Glu	Ala	Asn	Lys	Phe
210				215				220							
Gln	Val	Thr	Asp	Ser	Ala	Ala	Phe	Asn	Ala	Leu	Val	Thr	Phe	Cys	Ile
225				230				235				240			
Arg	Asp	Leu	Ile	Gly	Cys	Leu	Gln	Lys	Leu	Leu	Phe	Gly	Lys	Val	Ala
245				250				255							
Lys	Asp	Ser	Ser	Arg	Met	Leu	Gln	Pro	Ser	Ser	Ser	Pro	Leu	Trp	Gly
260				265				270							
Lys	Leu	Arg	Val	Asp	Ile	Lys	Ala	Tyr	Leu	Gly	Ser	Ala	Ile	Gln	Leu
275				280				285							
Val	Ser	Cys	Leu	Ser	Glu	Thr	Thr	Val	Leu	Ala	Ala	Val	Leu	Arg	His
290				295				300							
Ile	Ser	Val	Leu	Val	Pro	Cys	Phe	Leu	Thr	Phe	Pro	Lys	Gln	Cys	Arg
305				310				315				320			
Met	Leu	Leu	Lys	Arg	Met	Val	Val	Val	Trp	Ser	Thr	Gly	Glu	Glu	Ser
325				330				335							
Leu	Arg	Val	Leu	Ala	Phe	Leu	Val	Leu	Ser	Arg	Val	Cys	Arg	His	Lys
340				345				350							
Lys	Asp	Thr	Phe	Leu	Gly	Pro	Val	Leu	Lys	Gln	Met	Tyr	Ile	Thr	Tyr
355				360				365							
Val	Arg	Asn	Cys	Lys	Phe	Thr	Ser	Pro	Gly	Ala	Leu	Pro	Phe	Ile	Ser
370				375				380							
Phe	Met	Gln	Trp	Thr	Leu	Thr	Glu	Leu	Leu	Ala	Leu	Glu	Pro	Gly	Val
385				390				395				400			
Ala	Tyr	Gln	His	Ala	Phe	Leu	Tyr	Ile	Arg	Gln	Leu	Ala	Ile	His	Leu
405				410				415							
Arg	Asn	Ala	Met	Thr	Thr	Arg	Lys	Lys	Glu	Thr	Tyr	Gln	Ser	Val	Tyr
420				425				430							
Asn	Trp	Gln	Tyr	Val	His	Cys	Leu	Phe	Leu	Trp	Cys	Arg	Val	Leu	Ser
435				440				445							
Thr	Ala	Gly	Pro	Ser	Glu	Ala	Leu	Gln	Pro	Leu	Val	Tyr	Pro	Leu	Ala
450				455				460							
Gln	Val	Ile	Ile	Gly	Cys	Ile	Lys	Leu	Ile	Pro	Thr	Ala	Arg	Phe	Tyr
465				470				475				480			
Pro	Leu	Arg	Met	His	Cys	Ile	Arg	Ala	Leu	Thr	Leu	Leu	Ser	Gly	Ser
485				490				495							
Ser	Gly	Ala	Phe	Ile	Pro	Val	Leu	Pro	Phe	Ile	Leu	Glu	Met	Phe	Gln
500				505				510							
Gln	Val	Asp	Phe	Asn	Arg	Lys	Pro	Gly	Arg	Met	Ser	Ser	Lys	Pro	Ile
515				520				525							
Asn	Phe	Ser	Val	Ile	Leu	Lys	Leu	Ser	Asn	Val	Asn	Leu	Gln	Glu	Lys
530				535				540							
Ala	Tyr	Arg	Asp	Gly	Leu	Val	Glu	Gln	Leu	Tyr	Asp	Leu	Thr	Leu	Glu
545				550				555				560			
Tyr	Leu	His	Ser	Gln	Ala	His	Cys	Ile	Gly	Phe	Pro	Glu	Leu	Val	Leu
565				570				575							
Pro	Val	Val	Leu	Gln	Leu	Lys	Ser	Phe	Leu	Arg	Glu	Cys	Lys	Val	Ala
580				585				590							
Asn	Tyr	Cys	Arg	Gln	Val	Gln	Gln	Leu	Leu	Gly	Lys	Val	Gln	Glu	Asn
595				600				605							
Ser	Ala	Tyr	Ile	Cys	Ser	Arg	Arg	Gln	Arg	Val	Ser	Phe	Gly	Val	Ser

610                      615                      620  
 Glu Gln Gln Ala Val Glu Ala Trp Glu Lys Leu Thr Arg Glu Glu Gly  
 625                      630                      635                      640  
 Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg  
                     645                      650                      655  
 Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu  
                     660                      665                      670  
 Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys  
                     675                      680                      685  
 Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe  
                     690                      695                      700  
 Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg  
 705                      710                      715                      720  
 Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu  
                     725                      730                      735  
 Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu  
                     740                      745                      750  
 Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly  
                     755                      760                      765  
 Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu  
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&lt;210&gt; 2735

&lt;211&gt; 1666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2735

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 180  
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 240  
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 360  
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 420  
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 540  
 atggacttct atgaaacaag tgctgcacc aacctcaaca ttaaagagtc attcacgcgt  
 600  
 ctgacagagc tgggtgctgca ggcccatagg aaggagctgg aaggcctccg gatgcgtgcc  
 660  
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 720

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780  
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840  
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900  
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960  
ttcagcctgt tccccagcc acaggcctgc tacgaccccc acgatgtgcc gcaagcactg  
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1080  
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1140  
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1200  
gtgtcctgct gtgtgcagct cgctctttcc ttccttctta agctatccaa ggggatggac  
1260  
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1320  
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1380  
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1666

<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

Met	Ala	Lys	Gln	Tyr	Asp	Val	Leu	Phe	Arg	Leu	Leu	Leu	Ile	Gly	Asp
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Ser	Gly	Val	Gly	Lys	Thr	Cys	Leu	Leu	Cys	Arg	Phe	Thr	Asp	Asn	Glu
		20					25						30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
		35					40					45			
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
		50					55				60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65					70					75				80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
			85						90					95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
		100						105					110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

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<210> 2738
<211> 299
<212> PRT
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&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

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 20 25 30  
 Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr  
 35 40 45  
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser  
 50 55 60  
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val  
 65 70 75 80  
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His  
 85 90 95  
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His  
 100 105 110  
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val  
 115 120 125  
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln  
 130 135 140  
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln  
 145 150 155 160  
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu  
 165 170 175  
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr  
 180 185 190  
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu  
 195 200 205  
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys  
 210 215 220  
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala  
 225 230 235 240  
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn  
 245 250 255  
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys  
 260 265 270  
 Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val  
 275 280 285  
 Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser  
 290 295

&lt;210&gt; 2739

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

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 gccgaggaca agagcatccg gctcggcttg tttctcatca tctccggcgt cgtgtcgctc  
 120  
 ttcattctcg gcttctgctg gctgagtcgc gcgctgcagg atctgcaagc cacggaggcc  
 180

aattgcacgg tgctgtcggg gcagcagatc ggcgaggtgt tcgagtgcac cttcacctgt  
240  
ggcgccgact gcaggggcac ctgcagtac ccctgcgtcc aggtctacgt gaacaactct  
300  
gagtccaact ctaggcgct gctgcacagc gacgagcacc agctcctgac caacccaag  
360  
tgctcctata tccctccctg taagagagaa aatcagaaga atttggaag tgatcatgaat  
420  
tggcaacagt actggaaga tgagattggt tccagccat ttacttgcta ttttaatcaa  
480  
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600  
tgtgccaaga gcttgccgtt caaggcggaa gccatgaaga agcgcaagtt ctcttaaagg  
660  
ggaaggaggc ttgtagaaag caaagtacag aagctgtact catcggcacg cgtccacctg  
720  
cggaacctgt gtttcctggc gcaggagatg gacagggcca cgacagggt ctgagagggt  
780  
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900  
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960  
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1140  
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1200  
gacgtcctgc ttggaaaatg aatagtatac tggtaactca gtctccagtc acctctgtgt  
1260  
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1320  
taaccattat tttcaccag attacttctt aagagaggga ggtgattctg aagaaggctt  
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ctatctcaaa aagcactggg ctctcttatt catctgttct tgttgTTTTT gacggagtta  
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a  
1501

&lt;210&gt; 2740

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

Glu Ser Arg Arg Glu Trp Gly Ala Met Ala Lys Leu Arg Val Ala Tyr

```

      1           5           10           15
Glu Tyr Thr Glu Ala Glu Asp Lys Ser Ile Arg Leu Gly Leu Phe Leu
      20           25           30
Ile Ile Ser Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu
      35           40           45
Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val
      50           55           60
Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys
      65           70           75           80
Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr
      85           90           95
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu
      100          105          110
His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys
      115          120          125
Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr
      130          135          140
Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln
      145          150          155          160
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile
      165          170          175
Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly
      180          185          190
Val Leu Ile Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys
      195          200          205
Ala Glu Ala Met Lys Lys Arg Lys Phe Ser
      210          215

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&lt;210&gt; 2741

&lt;211&gt; 1487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

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ttggatctgc agaacctcat tgattttggc cagaaaaagt ttagctgctg tggagggatt
120
tcctacaagg actggtctca gaacatgtat ttcaactgct cagaagacaa cccagtcga
180
gagcgtgct ctgtgcctta ctctgttgc ttgcctactc ctgaccaggc agtgatcaac
240
actatgtgtg gccaaaggat gcaggccttt gactacttgg aagctagcaa agtcatctac
300
accaatggct gtattgacaa gttggtcaac tggatacaca gcaacctatt cttacttggt
360
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480
ccatgggtact gagaatccat cctgcacctc ctcacatgg aaactggcaa gcctcataaa
540
cgaacagcag tgggtgctga aagcagcacc aaatggagat ttggattcca gccccagc
600

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gacagcccag tgggaagaag caaactccag atgggcagaa ggcaggggtgc acaggtggct  
 660  
 ccagtctcag gaggatgcgc ctctctcccc ccatcccagc cctcagcatt gtgccagagt  
 720  
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 780  
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 960  
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 1020  
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 1080  
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 1260  
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 1320  
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 1380  
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 1440  
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 1487

&lt;210&gt; 2742

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2742

Lys	Ala	Arg	Gly	Lys	Val	Ser	Glu	Ile	Ile	Asn	Asn	Ala	Ile	Val	His
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Tyr	Arg	Asp	Asp	Leu	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Phe	Gly	Gln	Lys
		20						25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
	35					40						45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
	50					55					60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
	65				70					75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
			85					90					95		
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
			100					105					110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
		115					120					125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile



130	135	140
Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp		
145	150	155
Pro Trp Tyr		160

<210> 2743  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

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 acagcctccc aagactcagg tgtccagtct ccacctggag cctccagaga ctggagtgtc  
 180  
 ccatctccgc ccagagccta ccaagactga ggtgtccagt ctccacctgg agcctccga  
 240  
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<210> 2744  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

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 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val  
 35 40 45  
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro  
 50 55 60  
 Arg Ala Tyr Gln Asp  
 65

<210> 2745  
 <211> 769  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 300  
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 360  
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 420  
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 480  
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 540  
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 600  
 cacaccacag ccaggagggg cctttcccac ctgggagaga aacttccaga ccagcccctc  
 660  
 ataccacagc caagaggggc ctttctcacc tggagagaaa cttccagacc agcccctcac  
 720  
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 769

&lt;210&gt; 2746

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2746

Met	Ser	Trp	Gly	His	Leu	Leu	Ser	Leu	Ile	Asp	Ala	Glu	Ser	Ile	Gln
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Lys	Leu	Pro	Asp	Gln	Pro	Ser	His	His	Thr	Gln	Lys	Arg	Pro	Phe	Pro
		20						25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
		35					40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
		50				55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70				75				80		
Pro	Ser	His	His	Ser	Gln	Glu	Gly	Pro	Phe	Pro	Pro	Gly	Glu	Lys	Leu
				85					90				95		

Pro Asp

&lt;210&gt; 2747

&lt;211&gt; 1100

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2747

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 gcaccacgga cggcgccag gaagcccag tccccctgga cgggggcctt ctggattccg  
 120

agggccccgg caggttcgcc caagggctgc ttcgcttgcg tgtccaagcc cctgcccctg  
 180  
 caggctccgg cgccccctgc ccctgagccc tcggcctctc ccccgatggc gccacactg  
 240  
 ttcccatgg agtccaagag cagcaagacc gacagcgtgc gggctgcccg cgcgccccct  
 300  
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 360  
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 420  
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 480  
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 720  
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 aatacccatg cagctccaaa  
 1100

&lt;210&gt; 2748

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2748

Phe	Phe	Phe	Ser	Arg	Pro	Arg	Ala	Pro	Ala	Ser	Ala	Gln	Pro	Arg	Trp
1			5				10					15			
Glu	Pro	Arg	Pro	Ala	Pro	Arg	Thr	Ala	Pro	Arg	Lys	Pro	Glu	Ser	Pro
			20				25					30			
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35				40					45				
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50				55					60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65				70					75					80	
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
			85					90					95		
Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

```
<210> 2749
<211> 2050
<212> DNA
<213> Homo sapiens
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<400> 2749
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120
gtacttcaca tccttctctg cagatgctct gacctttgac ccctgccgtt cagctctagg
180
gcccgtgcag gccacaccat gaacacctcc ccaggcacgg tgggcagtga cccggtcac
240
ctggccactg caggctacga ccacaccgtg cgcttctggc aggccacag cggcatctgc
300
acccggacgg tgcagcacca ggactcccag gtgaatgcct tggagggtcac accggaccgc
360
agcatgattg ctgctgcagt tcagcctgtg tccttaggtt accagcacat ccgcatgtat
420
gatctcaact ccaataacct taaccccatc atcagctacg acggcgtcaa caagaacatc
480
gcgtctgtgg gcttcacga agacggccgc tggatgtaca cgggcggcga ggactgcaca
540
gccaggatct gggacctcag gtcccggaac ctgcagtgcc agcggatctt ccagggtgaac
600
gcacccatta actgcgtgtg cctgcacccc aaccaggcag agctcatcgt ggggtgaccag
660
agcgggggcta tccacatctg ggacttgaaa acagaccaca acgagcagct gatccctgag
720
cccgaggtct ccatacgtc cgccacatc gatcccgacg ccagctacat ggcagctgtc
780
aatagcaccg gaaactgcta tgtctggaat ctgacggggg gcattggtga cgagggtgacc
840
cagctcatcc ccaagactaa gatccctgcc cacacgcgct acgccctgca gtgtcgcttc
900
agccccgact ccacgtcctt cgccacctgc tcggctgacg agacgtgcaa gatctggagg
960
acgtccaact tctccctgat gacggagctg agcatcaaga gcggcaaccc cggggagtc
1020

```

tccccgggct ggatgtgggg ctgcgccttc tcgggggact cccagtacat cgtcactgct  
 1080  
 tcctcggaca acctggcccc gctctggtgt gtggagactg gagagatcaa gagagagtat  
 1140  
 ggcggccacc agaaggctgt tgtctgctg gccttcaatg acagtgtgct gggctagcct  
 1200  
 gtgacccctc gggactgcct ggtgcagggtg gtggcagctg gagggacca tgcagcacc  
 1260  
 aggtcagagc agaccctccc ctgccggcct gcgccagctg gacctgatgg cccctgtgg  
 1320  
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 1380  
 tgtgacagag ctcgacccaa gccaggctgc aactcctgg actgggctag cctgcactgc  
 1440  
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 1500  
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 1560  
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 1680  
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 1800  
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 1860  
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 1920  
 gcctcttgga ccttgagggt atccaccagc agccgcaggt ctcccgatca ctgtcctcca  
 1980  
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 2040  
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 2050

&lt;210&gt; 2750

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2750

Met	Asn	Thr	Ser	Pro	Gly	Thr	Val	Gly	Ser	Asp	Pro	Val	Ile	Leu	Ala
1				5				10					15		
Thr	Ala	Gly	Tyr	Asp	His	Thr	Val	Arg	Phe	Trp	Gln	Ala	His	Ser	Gly
		20						25				30			
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35				40					45				
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
	50					55					60				
Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65				70					75					80	
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

```
<210> 2751
<211> 1877
<212> DNA
<213> Homo sapiens
```

```

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120
agaagagctt tcacaagcac tcggccaccc ccaactacac gcaactgtggc ctcttcgggg
180
accacacact caggactttc accgaccgct tccagacctg caaggtgcag ggcgcctggc
240
cgctcatcga caataattac ctgaacgtgc aggtcaccaa cacgcctgtg ctgccagct
300
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360
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420
agaacgggtg ggacaagcac ggggccaaca gcctgaagat cactgagaag gtgtcaggcc
480

```

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540  
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600  
acagccaggg tctctacctc tgcctgcggg gctgccccct caaccagcag atcgacttcc  
660  
aggccttcca caccaatgct gagggcaccg gtgcccgcag gctggcagcc gccagccctg  
720  
caccacagc ccccagagacc ttcccatatc agacagccgt ggccaagtgc aaggagaagc  
780  
tgccggtgga ggacctgtac taccaggcct gcgctcttga cctcctcacc acgggcgacg  
840  
tgaacttcac actggccgcc tactacgcgt tggaggatgt caagatgctc cactccaaca  
900  
aagacaaact gcacctgtat gagaggactc gggacctgcc aggcagggcg gctgcggggc  
960  
tgccccctggc cccccggccc ctccctggcg ccctcgctcc gctcctggcc ctgctccctg  
1020  
tgttctgcta gacgcgtaga tgtggaggga ggcgcgggct ccgtcctctc ggcttcccc  
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1260  
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1560  
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1800  
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1860  
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1877

&lt;210&gt; 2752

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

Xaa His Glu Pro Ala Gln Leu Leu Gln Gly Trp Pro His Leu Ala Ala  
 1 5 10 15  
 Thr Pro Ala His Ala Pro Thr Xaa Pro Glu Thr Ala Arg Ser Ala Arg  
 20 25 30  
 Thr Ala Pro Arg Ser Ala Ile Thr Arg Arg Ala Phe Thr Ser Thr Arg  
 35 40 45  
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser  
 50 55 60  
 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly  
 65 70 75 80  
 Arg Ser Ser Thr Ile Ile Thr  
 85

&lt;210&gt; 2753

&lt;211&gt; 2561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

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 120  
 gagttcctca cccttctggc cgtgtgccac acggttggtc ctgagaagga tggagataac  
 180  
 atcatctacc aggcctcttc cccagatgaa gctgcttttg tgaaaggagc taaaaagctg  
 240  
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 300  
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 360  
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 420  
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 660  
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 720  
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 960  
 cggaggagtt tcctggattt ggcactctcg tgcaaagcgg tcatatgctg cagagtgtct  
 1020



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2160  
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2220  
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2280  
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2340  
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2400  
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2460  
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2520  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a  
2561

&lt;210&gt; 2754

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2754

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Xaa Pro Ser Ser Asp Asp Phe Cys Arg Met Pro Pro Pro Cys Ser Asp
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Ser Cys Asp Phe Asp Asp Pro Arg Leu Leu Lys Asn Ile Glu Asp Arg
      20          25          30
His Pro Thr Ala Pro Cys Ile Gln Glu Phe Leu Thr Leu Leu Ala Val
      35          40          45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
      50          55          60
Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
      65          70          75          80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
      85          90          95
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
      100          105          110
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
      115          120          125
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
      130          135          140
Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
      145          150          155          160
Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
      165          170          175
Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
      180          185          190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
      195          200          205
Ile Ile Glu Lys Asn Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
      210          215          220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
      225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
      245          250          255
Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile
      260          265          270
Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln
      275          280          285
His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
      290          295          300
Leu Ile Ile Asp Gly His Thr Leu Lys Tyr Ala Leu Ser Phe Glu Val
      305          310          315          320
Arg Arg Ser Phe Leu Asp Leu Ala Leu Ser Cys Lys Ala Val Ile Cys
      325          330          335
Cys Arg Val Ser Pro Leu Gln Lys Ser Glu Ile Val Asp Val Val Lys
      340          345          350
Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp
      355          360          365
Val Gly Met Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn
      370          375          380
Glu Gly Met Gln Ala Thr Asn Asn Ser Asp Tyr Ala Ile Ala Gln Phe

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385          390          395          400
Ser Tyr Leu Glu Lys Leu Leu Leu Val His Gly Ala Trp Ser Tyr Asn
          405          410          415
Arg Val Thr Lys Cys Ile Leu Tyr Cys Phe Tyr Lys Asn Val Val Leu
          420          425          430
Tyr Ile Ile Glu Leu Trp Phe Ala Phe Val Asn Gly Phe Ser Gly Gln
          435          440          445
Ile Leu Phe Glu Arg Trp Cys Ile Gly Leu Tyr Asn Val Ile Phe Thr
          450          455          460
Ala Leu Pro Pro Phe Thr Leu Gly Ile Phe Glu Arg Ser Cys Thr Gln
465          470          475          480
Glu Ser Met Leu Arg Phe Pro Gln Leu Tyr Lys Ile Thr Gln Asn Gly
          485          490          495
Glu Gly Phe Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu
          500          505          510
Val His Ser Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His
          515          520          525
Asp Thr Val Leu Thr Ser Gly His Ala Thr Asp Tyr Leu Phe Val Gly
          530          535          540
Asn Ile Val Tyr Thr Tyr Val Val Val Thr Val Cys Leu Lys Ala Gly
545          550          555          560
Leu Glu Thr Thr Ala Trp Thr Lys Phe Ser His Leu Ala Val Trp Gly
          565          570          575
Ser Met Leu Thr Trp Leu Val Phe Phe Gly Ile Tyr Ser Thr Ile Trp
          580          585          590
Pro Thr Ile Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val
          595          600          605
Leu Ser Ser Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala
          610          615          620
Cys Leu Ile Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys
625          630          635          640
Lys Thr Leu Leu Glu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val
          645          650          655
Leu Gly Lys Ala Val Leu Arg Asp Ser Asn Gly Lys Arg Leu Asn Glu
          660          665          670
Arg Asp Arg Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu
          675          680          685
Phe Arg Gly Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe
          690          695          700
Ser Gln Glu Glu His Gly Ala Val Ser Gln Glu Glu Val Ile Arg Ala
705          710          715          720
Tyr Asp Thr Thr Lys Lys Lys Ser Arg Lys Lys
          725          730

```

&lt;210&gt; 2755

&lt;211&gt; 4795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

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gcaccaaattc attatcaggc agtatgtcgt gcactgtttg cagaaacaat ggagctccat

120

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aagagcgatg aatctagcac agacttggaa gagctgaaaa acgctgactg ggcacgattc  
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420  
ttaaaaaaga gtgctcatga aatcatcctc gacttcatca gatccagacc tcctttaaat  
480  
ccagtctcag ccagaaaact gaaaccaact ccaccacggc cacggagcct ccatgaaaga  
540  
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&lt;210&gt; 2756

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2756

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<213> Homo sapiens

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<213> Homo sapiens

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&lt;211&gt; 2210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2763

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